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HAMILTON, J.
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OBSERVATIONS
ON THE
UTILITY AND ADMINISTRATION
OF
PURGATIVE MEDICINES.

OBSERVATIONS
ON THE
UTILITY AND ADMINISTRATION
OF
PURGATIVE MEDICINES
IN
SEVERAL DISEASES.

BY JAMES HAMILTON, M.D.

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MEMBER OF THE MEDICAL LYCEUM OF
PHILADELPHIA.

FOURTH EDITION,

WITH ADDITIONAL OBSERVATIONS AND CASES.

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TO
JAMES RUSSELL, ESQ.

PROFESSOR OF CLINICAL SURGERY IN THE
UNIVERSITY OF EDINBURGH.

My Dear Sir,

IF the following Observations had been of that importance in respect of science, as to have made a particular Dedication of them necessary, or proper; and if I had been to select a Patron of distinguished literary endowments, and of extensive and correct professional acquirements, there is no one who would have sooner occurred to me than yourself.

Sentiments, however, prompting an address less formal, and, therefore, I trust, to you not less agreeable, induce me, in a manner more familiar and more sincere, to acknowledge my obligations to you for many instances of your private friendship; and to thank you for the encouragement you gave me on the present occasion, without which, I probably neither would have undertaken, nor have accomplished this little work.—I am,

Dear Sir,

With much regard,

Your faithful and obedient Servant,

JAMES HAMILTON.

EDINBURGH, }
1st Nov. 1805. }

PREFACE

TO THE FIRST EDITION.

As the doctrine which I maintain, with respect to the exhibition of purgative medicines, may have the appearance of novelty; in order to obviate any prejudice, it is incumbent on me to state the rise and progress of the opinions which I entertain upon this subject, and to produce the facts on which the practice I recommend is founded.

With this view, I hope it will not be thought presumptuous, to give some account of the opportunities which I have enjoyed, for collecting accurate and extensive information, in the different diseases of which I treat in the following Observations.

I have occupied places of professional trust and responsibility in Edinburgh for upwards of thirty years. During the whole of this period, I have discharged the duties of Physician to the Royal Infirmary, to George Heriot's Hospital, and to the Merchants and Trades Hospitals of this city.

In the midst of these constant, and sometimes laborious occupations, in which I have been engaged, my attention was, many years ago, attracted to the purgative effect of medicines given in Typhus fever. The facts which then presented themselves to my notice, induced me to repeat these medicines again and again; till, by slow advances, I at last acquired confidence in the practice. Many opportunities have since occurred to me of confirming these observations, which, in my apprehension, clearly establish the safety and utility of giving purgative medicines in the course of Typhus fever, under the limitations which I point out.

I was afterwards disposed to judge favourably of the same practice in Scarlatina; and

the utility of it in this disease has been confirmed by much experience.

Thus my views respecting the use of purgative medicines became more and more extensive; and, in process of time, I employed these with a freedom not usual, but with manifest advantage, in several other diseases.

My own experience of the utility of this practice, is the circumstance which encourages me to pursue it with steadiness. But to inspire others with the same degree of confidence, it will be requisite to adduce proofs which have satisfied me of its superiority to that in common use.

The number, the authenticity, and the apposite application of the cases inserted in the Appendix, will, I trust, prove sufficient to establish the soundness of the principles upon which I proceed, and to satisfy the most sceptical. Many of these cases are those of patients who have been under my own care in the Infirmary; and they are transcribed from the records of that institu-

tion, by the permission of the managers. To shew the consequence and authenticity of these cases, I shall mention some particulars relative to the arrangement of medical practice in the Hospital.

The University of Edinburgh had already attained a high and deserved reputation as a school of medicine, when the Royal Infirmary was opened in the year 1741. It was soon perceived, that the University and the Infirmary might be made to afford mutual and valuable aid to one another. The medical education, it was evident, would be rendered more complete, by giving the students of the University access to the Infirmary, where they might learn the practical part of their profession; while the funds of the Hospital would be augmented by the fees which the students would pay for the liberty thus granted to them to visit the patients, and observe the practice as conducted in it.

Accordingly, arrangements respecting the detail of practice in the Hospital, suited to these views, were made; which, while they

secured to the patients benefits superior, I believe, to what are experienced in most similar institutions, at the same time afforded to the medical student opportunities of acquiring the practical knowledge of his profession, seldom to be found in other hospitals.

By the regulations of the Managers, the Physicians of the Royal Infirmary give daily attendance, at a certain hour; take the full charge of their respective patients, and interpose directly in every circumstance relative to the conduct of their cure.

The two Physicians named by the Managers, have an equal share of duty, and divide the patients equally between them.

A clerk is attached to each Physician. He is commonly a young gentleman, who is advanced in his studies. He resides in the Hospital, and has a general superintendence of the patients who are under the charge of the Physician with whom he is connected. Besides other duties, it is his business to prepare a written account of the symptoms of those patients, who fall under

the care of the Physician whose clerk he is. He inserts this account in the journal-book, and reads it to the Physician at the bedside of the patient, on the following daily visit.

The Physician either admits this account simply, or makes additions and alterations, as he may think proper.

Regular reports of the subsequent state of the symptoms, of the remedies prescribed, and of the effects of these, are given daily, or as often as the chronic nature of the case may make them necessary. These reports are the result of the accounts which the patients give of themselves, of the accounts which are received from the nurses, or of both together; they are dictated by the Physician to his clerk, who, at the time, enters them into the journal-book.

All these proceedings take place in public, in the presence, and in the hearing, of a number of young gentlemen, who attend the Hospital, many of whom are competent judges of what is going forward.

Thus, the Physician must include, in his reports, all the circumstances, as they arise in particular cases ; circumstances over which he has no controul, and which must inevitably direct his practice. Further, the Physician of the Royal Infirmary, in consequence of his attendance every day, is enabled to follow out his practice with peculiar precision and accuracy ; to do which he is also stimulated by the interest which he cannot but take in his patients, not unfrequently friendless strangers ; and, by the unavoidable publicity of his whole procedure respecting them, which places him often in delicate and trying situations.

Cases then of this description, which, in their progress, cannot be perverted to particular purposes, and which cannot afterwards be altered, by any retrospective emendation of the Practitioner, possess an authenticity peculiar to themselves ; and, in the establishing of medical facts, may be produced as an authority, that cannot be controverted. 'Indeed, I esteem myself fortunate in having documents of this kind to adduce, in support of a practice, which may be thought

to require all the confirmation which the most incontrovertible evidence can afford. These cases, inserted in the different numbers of the Appendix, are dated from the Royal Infirmary.

Again, in further support of the exhibition of purgatives, in the diseases of which I treat, I insert, in the proper numbers of the Appendix, histories of cases from my private practice ;—and although these are not supported by the same public testimony, as those which are extracted from the records of the Hospital, yet I trust they will be received with all the credit due to cases, which rest upon the authority of any individual Practitioner.

The favour of my friends, who have had the goodness to oblige me with communications from their private practice, likewise enables me to give farther evidence of the utility of the plan which I recommend. This is the more gratifying to me, as it thus appears, that gentlemen of high professional respectability approve and adopt, in the instances to which their communications refer,

the practice which I have endeavoured to introduce.

Before I conclude these preliminary remarks, I beg leave to observe, that I do not willingly obtrude myself on the public, in the character of an author; but different reasons concur to overcome my backwardness to do so, and even to render a full exposition of my practice a measure of prudence and of self-defence. A number of intelligent, well-informed young gentlemen, who attend the Hospital, have become converts to the free exhibition of purgative medicines, which they have seen me employ with so much advantage. By this means, the peculiarities of my practice here, have passed silently into the world, unexplained and unsupported by the proofs and illustrations which it was in my power to produce; they have been partially noticed in one periodical publication; and made the subject of hasty and mistaken criticism in another. Dreading, therefore, that under these disadvantageous circumstances, the practice might be prejudged, and of course, neglected, I

have endeavoured to procure for it a fair and unprejudiced hearing, by placing it before the public, in my own words.

To the public decision I will submit, with deference and respect; at the same time, I rely with confidence on its impartiality; and trust, that no person of character will condemn the practice, which I now recommend, till after repeated trials, agreeably to the plan which I have myself observed.

Edinburgh, 1st Nov. 1805.

PREFACE

TO THE FOURTH EDITION.

MY acknowledgments are equally due to the profession and to the public, for their candid reception of the following work. It has now been submitted to their consideration for six years ; and if I am not misinformed, the practice which it recommends still continues to rise in general estimation. I have thus been gratified with the thoughts of having contributed something to the improvement of medicine, and to the health and happiness of mankind.

At the same time, it is my duty to state, that several instances have come to my knowledge, in regard to which the failure of purgative medicines has been ascribed to some

fallacy or some insufficiency of the principle on which they had been administered. These instances I have considered with all the care and patience which they seemed to deserve ; and have found reason to believe, that, with respect to them, there existed either some misconception of the principle itself, or some want of attention to those circumstances, by which I have repeatedly said that the application of it ought to be regulated. A few additional explanations on my part may not, therefore, be altogether unnecessary.

By the misconception to which I have alluded, I am understood to recommend full purging : and this erroneous conclusion appears to have originated in the very common association established in the mind between that effect and the exhibition of purgative medicines ; while some of my early remarks on the subject have not been duly weighed. For, when speaking of the distinction that is usually made between purgative and laxative medicines, and objecting to it as not quite correct, I say, page 24, “ As this distinction, however, has acquired the sanction of ages, I might have passed it in silence, had it not been necessary for me to notice it ; as,

from experience of their superior usefulness, I employ almost solely what are understood to be purgative medicines, while I avoid their full effect of purging." And again, page 25, "This explanation obviates one objection, not unfrequently made to the employment of purgative medicines, namely, that they are apt to reduce farther the strength of a patient already too weak. Purgings will undoubtedly debilitate the body, by causing a flow of fluids greater than usual into the cavity of the intestines, and probably by hurrying off the chyle, and precluding its passage into the system. It is in this manner useful and advantageous in some diseases. This effect, however, is not required in the diseases which are the subject of the following observations, in which the sole intention is to evacuate the contents of the bowels, which, being out of the course of the circulation, are in a manner already extraneous to the body. Purgative medicines, given under this condition, will not induce debility; on the contrary, in the state of disease of which I treat, the bowels, being excited to propel their contents, their functions are restored; appetite and digestion are improved; and the patient, so far from being weakened, is nourished, support-

ed, and strengthened." Thus I institute a course of purgative medicines, to effect the salutary purpose of restoring and supporting regularity in the alvine evacuation. A course of purging would defeat this end : in fact it would quickly exhaust and destroy the patient.

The principle, then, on which I steadily proceed, is to obviate constipation, and, at the same time, to avoid purging. Many passages in my book bear directly on this point * ; the general scope of my observations attests its importance ; and the detail of cases in the Appendix shews with what scrupulous uniformity I adhere to it.

But if a right understanding of the principle be necessary for conducting the practice, the inspection of the alvine evacuations, and the guarded prosecution of a course of purgative medicines, are not less necessary to ensure its ultimate success.

Every one knows, that purgative medicines act according to peculiarities of constitution, and the nature and progress of disease.

* Pages 37, 40, 41, 58, 59, 66, 89, 120, 162.

Hence the inspection of the feces is requisite to regulate the strength of subsequent doses of the medicine, and the frequency with which they ought to be repeated, in order that the desired effect may be obtained, while purging is carefully avoided.

Whether these medicines operate in the chronic diseases, of which I treat, by unloading or by stimulating the bowels, a course of them is necessary to the attainment of either effect; and it is equally necessary to persevere in this course till the cure is complete; otherwise the disease, subdued only in part, may soon reappear, to the mortification of the practitioner, and to the distress and danger of the patient.

From these considerations arise the earnestness and anxiety with which I press the circumstances I have now mentioned upon the notice of the reader; and the final remarks which I have made concerning them at pages 199, 200, shew how important I conceive them to be in guiding the course of practice. In my opinion, indeed, it is chiefly through them that safety may be combined with suc-

cess in the administration of purgative medicines.

These quotations, and the passages to which I have referred, explain and illustrate the principle of my practice, and the rules by which it is guided, in so distinct and precise a manner, that I was willing to hope they could not easily have been mistaken. It would appear, however, that they have not always been read and considered with the attention which the novelty of my views with regard to some diseases, and the success of my mode of treating them, might have claimed. Against inadvertencies of this kind, of which, on the appearance of a new work, I was not unaware, I laboured to guard the reader in the last paragraph of the Preface to the first edition. "To the public decision I will submit, with deference and respect; at the same time, I rely with confidence on its impartiality; and trust, that no person of character will condemn the practice, which I now recommend, till after repeated trials, agreeably to the plan which I have myself observed."

Edinburgh, 1st Nov. 1811.

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CHAP. I.

OBSERVATIONS ON IMPEDIMENTS TO THE IMPROVEMENT OF MEDICINE.

PHYSICIANS are guided in their more early professional pursuits, by the doctrines which they have imbibed in the schools, by the sentiments of authors whom they have chiefly consulted, and by the example of those whose practice they have proposed to follow. Subsequent information, however, derived from new discoveries and from personal intercourse with the sick, inclines them not unfrequently to make some changes, sooner or later, in those speculative opinions, and in that course of practice, which they may have at first adopted.

It has been remarked, on this account, that medicine is fluctuating and uncertain, but in my

opinion, with no good reason. The innovations which are introduced are unavoidable ; they result from the situation in which practitioners are placed ; and indicate neither want of steadiness on their part, nor of certainty in the profession. They always tend to improve the science, when they originate in good sense and attentive observation. To represent, therefore, the practice of medicine as variable, in consequence of changes inseparable from its progressive state, is to take an unfair and a partial view of the case. On the same ground, and with equal justice, all the principal employments of life are liable to a similar objection.

The improvement of medicine has indeed been slow, when compared with that of some of the other arts and sciences. The extent and intricacy of the subject will in part account for this circumstance ; while, at the same time, it must be evident, that its progress will be influenced by the character, the genius, and the learning of its cultivators, and by the spirit of prevailing philosophies, always interwoven with reasoning in medicine.

So various are the symptoms and modifications of diseases, which unfold themselves gradually to the attentive observer, that he often finds it difficult to express them in words, and still more to convey the ideas he has formed of their intricate relations. Were this task however more easily accomplished, yet every one has neither the leisure nor the opportunity necessary for committing his observations to writing. This kind of information, therefore, which constitutes, in a great measure, what is understood to be experience in medicine, too often dies with the individual, and is lost to the accumulative stock of medical knowledge.

Praetitioners, during a long period, forged shackles to themselves, by placing too implicit a confidence in the opinions of the antient physicians. They not only respected these opinions, but defended them as the standards of medical truth, and considered them as the only sure and safe guides. Satisfied with the practice which they had found sanctioned by men of eminence, nothing, they thought, was to be expected, or inquired for beyond the pale of their authority. Thus they had never presumed to think or rea-

son for themselves, with that free and unfettered mind which they ought to have preserved. Nay, even we, in our day, are still disposed to bend with too humble deference to the fathers of physic.

A prepossession in favour of our own early speculations represses that freedom of inquiry so necessary to the improvement of medicine. Under this prepossession, practitioners do not always see what is passing before their eyes in a just and proper light. They are thus apt to be deceived themselves, and to give to their observations a shade or colouring which deceives others.

Physicians, in conducting the cure of painful and dangerous diseases, have been led by an anxiety, creditable to their feelings, to the promiscuous employment of different active remedies, or to the adoption of them in so quick a succession, as to make it frequently uncertain to which of these remedies changes, which may take place in the course of the ailment, are to be referred. Much of the slow progress of medical improvement may be attributed to this circumstance.

The history of medicine, also, clearly shows, that theory or reasoning has contributed in no small degree to impede its progress. Physicians have at all times indulged the propensity natural to man to form hypotheses, and have raised up systems, on which they have sought to repose in the midst of doubt and difficulty. They have been unsuccessful, however, in establishing sound theory, from their not being fully acquainted with the structure of the organs of the human body, and from not possessing correct and enlarged views of their functions. Hence have arisen, in the forms of independent systems, the humoral or chemical, the mechanical and nervous pathologies. Each of these systems, considered separately, affords many just and important conclusions, which do not however serve as a basis for general theory.

Again, a strong passion for distinction and fame in the professors of medicine themselves, has prevented the happy combination of these systems, and counteracted the utility which might have been thence derived. The glory of establishing a new theory, and of constituting a new era in medicine, has induced the leaders of

each succeeding sect to attempt the overthrow of the systems of their predecessors, in order that their own particular doctrines might be more firmly established, and shine with unrivalled lustre.

It may also be observed, that dogmatists, in forming their systems, have sometimes assumed data, which, unsupported by facts and experience, rest on a train of conjectural reasoning. Systems of this description have checked rational inquiry ; have brought into discredit useful practice, because discordant with the principles on which they are founded ; and, leading us to reject the most obvious explanation of important facts, have on many occasions introduced much obscure language and vague reasoning into medical doctrines, from which, it is to be feared, and therefore to be regretted, that erroneous practical conclusions have been drawn.

I do not dwell with pleasure upon these causes, which I apprehend have retarded the progress of medicine. I venerate the memory of those of our predecessors, whose labours have obtained for the healing art, an important rank

in the estimation of mankind. As they have occasionally failed, however, in promoting the advancement of medicine, we ought to take a lesson from their failure, and avoid the circumstances which have occasioned it. We should not tamely acquiesce in opinions, how respectable soever from age and authority. We should receive, with laudable distrust, statements of facts proposed by others, till such time as we ascertain their accuracy. We should restrain within due bounds an overweening self-confidence, and scrupulously examine whatever may have appeared to us of importance in theory or practice, before we either adopt it ourselves, or bring it under the review of others. And, above all, we ought carefully to shun hasty conclusions and generalizations, which proceed only upon reasoning from matter of opinion. Be it our business, by a circumspect induction from facts, to establish sound principles, which will lead to the discovery of other facts, and these again to the introduction of more general doctrines, or a comprehensive and connected theory of medicine. This is safe dogmatism ; by it we will acquire useful knowledge more quickly, and be enabled to combine and arrange its different parts with

greater facility and precision, than by means of that meagre empiricism, so much vaunted at one time, but which, I believe, never did, and never can exist, independent of theory or reasoning, however incorrect.

CHAP II.

OBSERVATIONS ON THE FUNCTIONS OF THE STOMACH AND INTESTINES.

THE nutritious part of our food is prepared and separated by the changes which it undergoes in the mouth, œsophagus, stomach, and intestines. The process of digestion begins in the stomach, and, with the assistance of fluids secreted from the liver, spleen, and pancreas, is perfected in the smaller intestines, while the lacteal vessels, opening on their internal surface, absorb and convey the nutrimental fluid into the circulating system. The residue of the food, which is not adapted to afford nourishment, constitutes part of the fecal evacuation which is made directly from the intestinal canal.

It is probable that this fecal residue is dis-

charged into the more capacious colon at its commencement, where the ileum enters it by a lateral opening, so contrived, that the contents of the colon cannot be returned. This circumstance makes a distinction between the functions of the smaller and larger intestines, which is not commonly noticed. The former complete the preparation of the nourishment, and afford opportunity for its being absorbed; while the latter receive and detain the fecal part till after it has accumulated, and perhaps undergone certain changes, when it is voided in a given quantity, and at stated intervals.

Besides, the intestines exhale and throw off fluids which have become noxious in consequence of changes which they undergo in the body. The intestinal canal, therefore, serves the double purpose of repairing waste and of preventing decay. In this latter function, which I am solely to consider, the intestines co-operate with the other excretory organs, the skin, the lungs, and kidney. All these organs have, in respect of this their common relation to the system, a dependence upon one another, and any of them will compensate, to a certain extent, and

for a limited time, the interrupted action of the others. Nevertheless, their full activity is necessary to the enjoyment of perfect health, and the continuance of life ; and the regularity of the intestinal evacuation is connected, in a particular manner, with the well-being and healthy state of the stomach and intestines themselves. The urine and perspirable matter pass off immediately after being secreted, and do not load the organs which separate them. The unnatural detention of these excretions has indeed a more or less remote, and often a fatal effect upon the general system ; but the skin and the kidney remain uninjured. It is otherwise with the intestines : secluded from that communication with the atmosphere by which the perspirable matter is carried off, and unprovided with an appendage resembling the urinary bladder connected with the kidneys, they are the reservoirs of fecal matter as it is poured out, which they retain till the accustomed period of evacuation comes round. Different circumstances are apt to induce irregularity in this evacuation ; these, together with the facility with which the larger intestines admit of distention without uneasiness being excited, give frequent opportunity for a progressive

accumulation of feces, whence arise interrupted action of the stomach and smaller intestines, and consequent dangerous and fatal ailments.

In infancy, the alvine evacuation is frequent, and the feces are abundant and fluid. In mature years, the body is generally moved once in twenty-four hours; and the feces, although soft, preserve a form too well known to require description; they are of a yellow colour, and they emit a peculiar odour. When, therefore, the feces are evacuated less frequently than the age of a person demands; when they are indurated; when they change their natural colour and odour, derangement of the stomach and bowels is indicated, and the approach of disease, if disease be not already formed, is to be apprehended. For it is not to be imagined, that organs of so great importance in the animal economy, as the stomach and bowels are, can be long in a state of inaction, and the general health remain unimpaired. I am indeed aware, that constipation may sometimes prevail, even to a great extent, in robust and otherwise healthy people, without immediate injury. In such persons, the circulating system is powerful; the excrementitious fluids, therefore,

may be so quickly discharged by the other organs, as to leave a comparatively small proportion to be secreted into the intestines, incapable, from its bulk, to give a stimulus sufficient to excite a regular propensity to evacuate the bowels: this bulk, however, being gradually acquired, the feces are at last voided under the appearance of a costive stool. This constitutional constipation, however, is not unattended with danger, and it is at all times desirable to obviate it.

The propulsion of the contents of the intestines is effected by means of a vermicular, or, as it has been called, a peristaltic motion of the bowels from above downwards; hence torpor, or loss of tone in the muscular coat of the intestines, by which this motion is thought to be interrupted, is understood to be the cause of much distress, and tonic or stimulant medicines are employed to remedy this torpid state. I use this language, and speak of the torpor of the bowels, although my ideas respecting it do not correspond with those of others. I am inclined to think, that the symptoms referred to loss of tone, proceed, on many occasions, more directly from the impeded

peristaltic motion, the consequence of constipation. In this situation, we may easily understand, that the distended colon cannot, for want of space, receive the contents of the smaller intestines, which will of course stagnate throughout the whole canal; the action of which being thus interrupted, will soon altogether cease, and be at last inverted. The various ailments which thence ensue are daily before our eyes; and the relief which, under these circumstances, we observe to follow soon after the exhibition of a purgative, and the cessation of complaint, which takes place upon its operating freely by stool, are in proof that this opinion is well founded. If, again, we further consider, that the greater part of the exhalations made into the cavity of the intestines is excrementitious, and will, if retained beyond the usual period, undergo changes, and acquire injurious acrimony; and if, moreover, we advert to the sympathy which many of the organs of the complicated animal frame have with the stomach and intestines, we cannot but recognise the great influence which these must possess over the comfort, the health, and the life of the individual.

These are weighty considerations, and ought to excite our attention to any irregularity of the alvine evacuation. The necessity for this will farther appear, when we reflect that many circumstances, unavoidable in social life, expose mankind in a peculiar manner to constipation ; such as improper food, intemperance, sedentary occupations, in confined, or otherwise tainted air. Besides, in a therapeutic view, we are encouraged to exercise this attention. It is admitted that diaphoretic and diuretic medicines employed to remedy interrupted secretion by the skin and kidney operate circuitously, often possess deleterious qualities, or are uncertain and irregular in their effect ; while the means of removing constipation act directly on the seat of disease, are safe, and seldom disappoint us in the attainment of our object.

The diseases of the stomach and bowels are many and important ; they have excited much theoretical discussion, and have called forth a variety of practice. To enter, however, upon so wide a subject, and to investigate it in a satisfactory manner, would be to engage myself beyond my present intention. I propose to confine my

observations within narrower limits, and to take a practical view of a few diseases only, which I have ascertained to originate in constipation of the body, or at least to have an intimate connection with it.

There is certainly nothing new in the position that the loaded state of the intestinal canal commonly induces general bad health. But when I allege that this state accompanies and aggravates other symptoms of fever, and that it is the immediate cause of certain disorders incident to children and young people, I know that I advance opinions in which there is considerable novelty, but in which, I trust, the following sheets will satisfy the medical reader, there is an equal degree of soundness. For I have learned, that the due regulation of the alvine discharge constitutes much of the prophylactic part of medicine, and teaches the propriety of advising those who wish to preserve good health, or to recover it when it is impaired, to attend carefully to this circumstance. In this view, it may be proper on some occasions to counsel the valetudinarian to forsake the haunts and habits of fashionable life; to quit the crowded city, alluring amusements, and va-

rious occupations carried on in airless, or even in tainted rooms ; to shun luxurious tables, indolence, and late hours ; to retrace the steps by which he has deviated from simple nature, and to court the country, pure air, and simple diet. It may not, however, be convenient at all times to follow this advice ; and although followed, it may not always remove constipation and its attendant evils. In this event, as well as in those cases where constipation induces or accompanies disease, the interposition of purgative medicines becomes necessary.

CHAP. III.

GENERAL OBSERVATIONS ON PURGATIVE MEDICINES.

THE connection which subsists between organs that are distant from one another, and whose functions are distinct, has always presented difficulties to that arrangement of the articles of the *Materia Medica*, which is founded on the operation or effect of medicines upon the living body. This has been the case particularly with the classification of purgatives; for it is well known that emetic, diuretic, and diaphoretic medicines, have this in common, that in certain doses, and under certain circumstances, they will deviate from their usual course, and excite the alvine evacuation. In like manner, different applications to the surface move the belly. Among

these, that of cold is conspicuous, although this effect, however much it deserves to be noticed, appears to have been, in a great measure, if not altogether, overlooked by late writers on the interesting and popular subject of the cold affusion. Practitioners avail themselves of this diversified operation of medicines, while they disregard the difficulties of arrangement which it involves, and admit as purgative such medicines only as have a direct effect on the bowels in a short or given time after exhibition, whether they have been received through the stomach, or applied more immediately to the rectum.

In the dawn of Physic, purgative medicines were employed. But although they have been recommended by the earlier as well as by later writers, and although the indications they are meant to fulfil have been an object of attention to practitioners in all ages, yet I do not think that the extent of their utility has been always clearly perceived, or that their administration has been always properly directed.

Physicians, tinctured with the notions of judicial astrology, prescribed purgatives at certain

times and seasons, conceiving that they would prove beneficial or hurtful, according to the junction or opposition of the planets, the seasons of the year, or the age of the moon. These reveries, happily, have long since vanished, in the course of regular practice; and can now be traced only in directing the sage advice of the matron of the village and the hamlet.

The favourers of the humoral pathology, called in the aid of purgative medicines to expel peccant matter, previously separated from the mass of blood by an appropriate fermentation. They also taught, that different purgatives possessed distinct powers, and moved different fluids by a specific action. Hence they talked of cholagogues, phlegmagogues, hydragogues, and melanagogues; and they displayed no little sagacity in the selection of the purgative adapted to the expulsion of the fluid supposed to be prevalent at the time. This fermentation, however, and consequent deposition of peccant humours, have ceased to hold a place in the doctrines of physic; while the specific operation of purgatives, in expelling particular fluids, is neither confirmed by

subsequent experience, nor allowed to have much influence in practice.

Modern physicians have two objects in view in administering purgative medicines; the one to empty the bowels; the other to increase the secretion of fluids into the cavity of the intestines, or, in other words, to induce purging. A distinction is therefore made between laxative and purgative medicines, which is not perhaps altogether correct. Purgative medicines act by their stimulating power, which will be in proportion to the quantity or dose in which they are given. Four or six grains of submuriate of mercury, as many of aloes, and eight or ten drachms of Rochelle salt, will, in ordinary cases, prove purgative, and any of them in reduced doses will have a laxative effect only. As this distinction, however, has acquired the sanction of ages, I might have passed it in silence, had it not been necessary for me to notice it, as, from experience of their superior usefulness, I employ almost solely what are understood to be purgative medicines, in the diseases of which I am to treat, while I avoid their full effect of purging.

This explanation obviates one objection, not unfrequently made to the employment of purgative medicines, namely, that they are apt to reduce farther the strength of a patient already too weak. Purging will undoubtedly debilitate the body, by causing a flow of fluids greater than usual, into the cavity of the intestinal canal, and probably by hurrying off the chyle, and precluding its passage into the system. It is in this manner useful and advantageous in some diseases. This effect, however, is not required in the diseases which are the subject of the following observations, in which the sole intention is to evacuate the contents of the bowels, which, being out of the course of the circulation, are in a manner already extraneous to the body. Purgative medicines, given under this condition, will not induce debility; on the contrary, in the state of disease of which I treat, the bowels, being excited to propel their contents, their functions are restored; appetite and digestion are improved; and the patient, so far from being weakened, is nourished, supported, and strengthened.

Another objection to the use of purgatives is urged with a force that seems to carry conviction

along with it. It is observed, that the constant application of stimulating articles, creates a habit not only of using them, but entails also the necessity of occasionally increasing their stimulating power. Habit or custom will indeed reconcile us to the impression produced by unusual stimuli, and will counteract their effect in such manner, that, if the stimulus be suddenly withdrawn, or, which is the same thing, be not gradually increased, the functions of the organ to which it had been applied will become languid and irregular. This law of the economy no doubt extends to the promiscuous use of purgatives given unnecessarily during the enjoyment of perfect health. In many instances, however, of disease, constipation and accumulation of feces, demand this stimulus to restore the healthy state of the intestines, and to promote the expulsion of their indurated contents. In proportion as these objects are accomplished, the stimulus from the same purgative becomes more and more powerful; and so little is the necessity for continuing it, or for increasing its dose, that, on the contrary, were not the activity of the purgative diminished, or were it not withdrawn altogether, as convalescence ad-

vances, we should be in danger of inducing weakness by excess of purging.

Purgative medicines have also been thought unnecessary, on this account, that in many diseases little food is taken ; and, therefore, regular alvine evacuations are neither requisite nor to be expected. The residue of food unfit for the purpose of nutrition contributes, no doubt, its share of feculent matter ; yet the abundant secretion from different organs, and the exhalation of excrementitious fluids made into the cavity of the intestines, constitutes the bulk of the feces collected within them. So long, therefore, as fluid is supplied, and so long as the circulation is supported, it is equally easy to understand how feces are produced, independently of much solid food, as to perceive the necessity of their daily evacuation during the course of fever, and of other diseases of long continuance.

If the people at large, only, had entertained the above objections to the use of purgative medicines, I might have left it to medical men to obviate them by a prudent opposition ; but, unhappily, they make part of the creed of many prac-

titioners, and, leading to narrow and improper views, they give an unpropitious direction to the conduct of the cure of diseases: for this reason I have thought proper thus to state my sentiments freely on the subject.

Besides unloading the bowels, purgative medicines are said to stimulate the ducts of different glands connected with the stomach and intestines, and to promote their respective secretions; and, to this effect, much of the utility of purgatives is attributed. I think it unnecessary to inquire whether this opinion be well or ill founded; for, without derogating from the good effects of purgatives acting in this way, I will only observe, that I refer the benefits arising from them to their sensible effect in unloading the bowels, rather than to one which is less obvious; and that, for the sake of perspicuity, I speak of this effect, as removing a cause of irritation, without, however, meaning to advance or support any theory on the subject.

I am now to consider more particularly the utility and administration of purgative medicines, according to these views which I entertain of

them. In prosecuting this subject, when I question the opinions of respectable men, I trust I shall speak with that deference which I feel to be due to them; and when I propose changes in practice, which experience has taught me to be useful, I will do so with a confidence commensurate with that experience which has been my guide.

CHAP. IV.

OBSERVATIONS ON THE UTILITY AND ADMINISTRATION OF PURGATIVE MEDICINES IN TYPHUS FEVER.

FEBRILE diseases, which constitute a great proportion of the disorders to which mankind are liable, have attracted much attention ; though the numerous and daily discussions, with regard to their nature, their causes, and the conduct of their cure, are a proof how little the medical world are satisfied with the explanations that have hitherto been given. Great learning and ingenuity have been shewn in their classification. It will, however, be admitted, I believe, that Dr Cullen has proposed the best arrangement of this subject in his *Synopsis Nosologiæ Methodicæ*. The class Pyrexiaë, according to him, comprehends five orders ; and the first order is that of

fever. Dr Cullen admits two genera of fever only, the intermitting and the continued; of the latter, typhus or nervous fever is most frequent, and is indeed so general, as to be endemial to every country with which we are acquainted. It is so common in Britain, that few in this island reach the years of manhood without having passed through it. Symptoms peculiarly distressing always accompany it, and in no instance can it be said to be without danger.

Different opinions have been entertained respecting the cause of typhus fever; but physicians seem now to be agreed in referring its origin to contagion.

The presence of typhus fever is known by the following symptoms: some derangement of the stomach, marked by loss of appetite, thirst, sickness, white or loaded tongue, disagreeable taste of the mouth, and most commonly, by constipation of the bowels, preceded by headach, languor, debility, and inaptitude for the usual mental and bodily exertions; morbid affections of the surface of the body, of the sanguiferous system, and of different secretions, soon succeed; to which,

in the more advanced stage, delirium, subsultus tendinum, floccitatio, and singultus, are super-added. These are generally supposed to arise from a considerable impression made upon the nervous system.

The above symptoms follow in succession, and commonly in the order in which I have enumerated them. As those which affect the stomach appear first, so they are the most permanent throughout the fever; they accompany the others as they arise, and may possibly influence their mildness or severity. They are, therefore, of great import, and demand particular attention in the treatment of fever.

I was appointed physician to the Royal Infirmary nearly forty years ago. At this time, the cure of typhus was thought to consist chiefly in the removal of atony and spasm of the extreme vessels of the surface of the body. For this purpose, together with other medicines, weak antimonials were given freely. An emetic and a purgative medicine were commonly exhibited on the first approach of the attack, but the state of the stomach and bowels was little regarded in

the after periods of fever. An alvine evacuation was occasionally procured by a mild glyster, while purgatives were given with extreme diffidence, lest by their operation they should rivet the spasm of the extreme vessels, and increase debility, one of the supposed direct causes of death in fever. These apprehensions may still bias the practice of many, as they certainly did bias mine for a long time.

A typhus fever, with symptoms more than usually malignant, appeared in Edinburgh in summer 1779. It originated in the hospital appropriated for the sick prisoners of war who were confined in the castle. Every precaution which prudence could suggest was employed, without effect, to prevent the spreading of contagion. Many of the soldiers in the garrison, and some of the inhabitants of the city, were seized with the fever.

In Summer 1781, a fleet of merchantmen from Jamaica, with their convoy, consisting of several ships of war, anchored in Leith roads. The passage had been tedious, the crews were sickly, and they had been for some time on short allow-

ance of provisions. Nevertheless, they had been obliged, by the circumstances of the war, to avoid the channel, and to come round by the north of Scotland. From the beginning of July to the 9th day of August, 126 men in fever were sent on shore from his Majesty's ship Suffolk, one of the convoy ; of these, twenty-three died ; and, of forty men who were landed from the Egmont, another of the convoy, eight died. Such of the sick as could not be accommodated in a temporary hospital were quartered in Leith, two, three, or four, being billeted in one house.

Many of the inhabitants were seized of course with a fever of the same kind with that which affected the seamen, and it prevailed in town for several years afterwards. These circumstances, the proximity of Leith to Edinburgh, and the reciprocal intercourse of the inhabitants, will account for the typhus gravior, which was frequent in both places at this time.

Having been often disappointed in promoting the cure of this fever by means of mild antimonials, which were then so much in use, I was in-

duced, by the same views which directed the employment of these, to use the *calx antimonii nitrata*, *Ph. Edin. editæ anno 1774*. I gave four or six grains of this preparation for a dose, which was repeated three or four times, at an interval of two hours, unless sweating, vomiting, or purging, were previously excited.

I resorted to this practice towards the termination of the fever, and in the treatment of those patients only of whose recovery I was exceedingly doubtful. I entertained hopes that a favourable crisis might be procured by the efficacy of the antimonial medicine; and, in the mean time, I thought I supported the strength of my patients by the moderate use of wine.

This antimonial remedy was not ineffectual; but I remarked that it was beneficial only when it moved the belly. In this case, the feces were black and fetid, and generally copious. On the discharge of these, the low delirium, tremor, floccitatio, and subsultus tendinum which had prevailed, were abated; the tongue, which had been dry and furred, became moister and clean-

er; and a feeble creeping pulse acquired a firmer beat.

On reflecting afterwards on these circumstances, it appeared to me to be probable, that, as the purgative effect of the calx antimonii nitrata had been the useful one, any purgative medicine might be substituted for it, and that, by this substitution, the unnecessary debilitation of an exhausted patient, by sweating and vomiting, would be avoided.

More extended experience confirmed these conjectures; and I was gradually encouraged to give purgative medicines during the course of typhus, from the commencement to the termination of the disease.

I have directed a strict attention to this practice for a long time, and I am now thoroughly persuaded, that the full and regular evacuation of the bowels relieves the oppression of the stomach, cleans the loaded and parched tongue, and mitigates thirst, restlessness, and heat of surface; and that thus the later and more formidable impression on the nervous system is prevented,

recovery more certainly and speedily promoted, and the danger of relapsing into the fever much diminished.

I am disposed to refer the superior utility of purgative medicines in typhus fever to the circumstance of their operating throughout the whole extent of the intestinal canal; to their acting upon an organ, the healthy functions of which are essential to recovery, in a manner that is consonant to the course of nature, by propelling its contents from above downwards; and to their moving, and completely evacuating, the feculent matter which, in this case, becomes offensive and irritating. Constipation, together with the change which fever appears to produce in the fluids secreted into the intestines, seems to be the cause of this alteration in the state of the feces. The necessity of expelling this noxious mass is, therefore, apparent; and if my opinion be correct, the operation of a glyster, the stimulus of which is confined to the rectum, must be altogether inadequate to procure the full evacuation which the circumstances of the case require. Accordingly, it is now some years since I have relinquished almost entirely

the use of emetics and glysters in fever; I trust to a purgative medicine to insure a regular alvine evacuation, although the daily exhibition of a purgative for this purpose is not always required. By this mode of treatment, I avoid the harassing distress which the operation of an emetic occasions, as well as the trouble and fatigue which accompany the exhibition of glysters.

This practice, by means of purgative medicines, does not supersede other remedies employed to fulfil other indications, particularly the free access to pure and fresh air. I am even ready to allow, that although I exclude emetics and glysters from my general practice in typhus fever, yet particular circumstances may arise to make both the one and the other necessary.

I cannot, however, avoid remarking, that, for many years past, I have found these other remedies, and wine in particular, to be less necessary than I formerly thought. This may be owing in part to typhus fever being less malignant than it was some time ago, and in part to the purgative medicines, which I employed with freedom,

removing and obviating symptoms of debility. If this be a just view of the case, the plain inference is, that while purgative medicines preserve a regular state of the body, they do not aggravate the debilitating effects of fever.

This doctrine is at variance with that which is commonly entertained ; but I am confident that it is consonant to the fact. The complete and regular evacuation of the bowels, in the course of fever, is the object to be attained. Within this limit I have had much satisfaction in prosecuting the practice ; nor have I, in a single instance, had occasion to regret any injury proceeding from it ; for I am not an advocate for exciting unusual secretion into the cavity of the intestines, and for procuring copious watery stools ; these, while they are not necessary, might increase the debility so much dreaded.

In most instances of fever, this practice, by purgatives, is conducted with ease, and a tolerable degree of certainty. The observation and experience of individuals may be necessary, on some occasions, for directing measures where it is not easy to lay down precise rules. The

effect of purgative medicines may not be foreseen in every instance, or be altogether immediately under command ; at any rate, however, the subsequent doses of purgatives, and the frequency of their repetition, will be regulated by the effect of preceding ones.

It is of importance to consult, in all respects, the ease and comfort of patients in fever. The exhibition of purgatives, therefore, should be so timed, that their effects may be expected during the day, when proper assistance can be best procured for the sick.

The purgative medicines which I have chiefly used in fever are, calomel, calomel and jalap, compound powder of jalap, aloes, solutions of any of the mild neutral salts, infusions of senna, and sometimes the two last conjoined.

My experience, in the treatment of typhus, enables me to draw the following conclusions :

1st, Purgative medicines are given with safety in typhus, to evacuate the contents of the bowels.

2d, Under this limitation, they may and ought to be exhibited at any period from the commencement to the termination of the fever.

3d, Under the same limitation, no circumstance or symptom, in the course of typhus, contra-indicates the exhibition of purgative medicines.

4th, The early exhibition of purgatives relieves the first symptoms, prevents the accession of more formidable ones, and thus cuts short the disease.

5th, In the advanced period of typhus gravior, symptoms that indicated the greatest danger were relieved by the evacuation of the bowels, and the patients, in this instance, recovered.

6th, Reconvalence from typhus is greatly promoted and confirmed, by the preservation of a regular state of the body. The same means secure against the danger of a relapse.

In corroboration of these conclusions, and in confirmation of the practice of exhibiting purgative medicines in the course of fever, I have in-

serted, in the Appendix, p. 11, several cases of fever from the records of the Royal Infirmary, which I treated almost solely with purgative medicines. In the same view I give also, in the Appendix, p. 48, Mr Price's Narrative of the Plague in Egypt; and I subjoin, at p. 39 of the Appendix, the sentiments of several respectable authors on the use of purgatives in typhus.

Although I consider the cases from the books of the Royal Infirmary to be highly important, and recommend them to be studied by those who are entering upon the profession of physic, I here subjoin an abstract of each case of typhus fever, for the satisfaction of others, whom leisure does not permit, and whom inclination does not lead, to engage in the perusal of histories of disease given so much in detail. These abstracts are in the order in which the cases follow one another in the Appendix.

John Denham, aged eleven.—Was convalescent on the ninth day of fever, and on the sixth from the commencement of the use of purgatives. No other medicine was given except an emetic on the second day, before I saw him.

James M'Kechny, aged twenty.—No medicines being previously given, he had a purgative without effect on the eleventh day of fever. The purgative was repeated on the twelfth day, when he had free passage of belly. No other remedy was employed ; and he was convalescent on the fifth day from the commencement of the treatment.

Robert Grant, aged twenty-one.—Had an emetic on the second day of fever, without relief. No further medical interposition took place till the eleventh day of the disease, when he became my patient, and when a purgative and a glyster were given. Two copious alvine evacuations were procured, and the patient was convalescent on the following day, the twelfth of the fever.

Jonathan Green, aged twenty-two.—An emetic given on the third day of fever was followed by full vomiting, three stools, and abatement of symptoms. These being aggravated on the seventh day, purgatives were given freely, and besides them one anodyne draught only. The patient was convalescent on the fourteenth day of

the fever. During ten days that he remained afterwards in the hospital, slight headach occurred, for which cinchona was given in small doses.

Robert Muckle, aged seventeen.—Had an emetic on the second day of fever, with relief. On the fourth and fifth he had a purgative medicine, and on the seventh day he was convalescent.

John Fairgrave, aged nineteen.—Had an emetic on the first day of fever, with relief; a purgative on the second, which operated well; and on the third day he was convalescent.

Donald Watson, aged twenty-three.—Had no medicines besides purgatives. He was convalescent on the twelfth day of the fever, and the eighth from the commencement of the treatment.

James Dennet, aged twelve.—Became my patient on the fourth, and was convalescent on the tenth day of fever. Besides purgative medi-

cines, he had an anodyne draught for two nights, the *mistura salina ammoniata*, and one emetic, which operated by stool.

James Grant, aged eighteen.—When convalescent from fever, suffered a relapse, attended with pain of abdomen, pain of internal fauces, and eruption of reddish spots over the surface of the body. He had taken an emetic and some laxative pills before he became my patient, on the sixth day after the relapse; and on the ninth day from this period he was convalescent. Purgatives were given freely. He had besides an anodyne draught for five nights, and two pounds of sack whey daily for three days.

John Baird, aged eleven.—Became my patient on the sixth day of fever, in the progress of which suspicion of the presence of *hydrocephalus internus* arose. He was convalescent on the eleventh day from the commencement of the treatment, during which he had three purgatives, with good effect. Besides these, he had eight ounces of wine for one day, the *mistura diaphoretica salina* for seven days, a mercurial pill for four, and

an anodyne draught for two nights, and his head was blistered.

Donald Stewart, aged nineteen.—In this case, the febrile were combined with pectoral symptoms, at one time, and with an inflammatory affection of the throat at another. The fever was protracted; and it affords an instance of the freedom with which purgatives were given in its advanced period, and in the reduced state of a patient.

Margaret Manson, aged twenty.—Became my patient on the third day of fever. She had two brisk purgatives; and no other medicine; and she was convalescent on the third day from the commencement of the treatment.

Margaret Kennedy, aged seventeen.—Became my patient at an uncertain period of fever. She had no medicine besides three purgatives, which procured two full alvine evacuations, the first of feces which were dark-coloured and fetid, the second of feces in all respects natural. She was convalescent on the fourth day of the treatment.

Jean Wyllie, aged twenty-five.—Had a purgative medicine on the fourth day of fever, which procured two copious and natural stools. She was convalescent on the seventh day from the attack.

William Mackay, aged thirty.—Had an emetic, with relief, on the second day of fever. He became my patient on the third day of the disease, when he had a purging dose, which procured an easy alvine evacuation, and he was dismissed cured on the 5th day from the attack.

Mary Stalker, aged eighteen.—Had a purgative and an opiate on the third day of fever; the former was repeated on the fourth, and the latter on the fifth; and she was dismissed convalescent, on the sixth from the attack.

Ann Henderson, aged eighteen.—Laboured under pectoral complaints, along with symptoms of typhus. She had been blooded, and a blister had been applied previous to her becoming my patient, on the eighth day of the fever. On the eleventh day from the attack, she had a full alvine evacuation, in consequence of a large dose of a

purgative medicine ; an anodyne injection having been premised, to insure the retention of the purgative. The febrile symptoms immediately ceased, and, on the seventh day after her appearance in the hospital, she was dismissed cured.

CHAP V.

OBSERVATIONS ON THE UTILITY AND ADMINISTRATION OF PURGATIVE MEDICINES IN SCARLATINA.

No disease has attracted greater attention than scarlatina. Its frequent appearance, and its fatal tendency, have claimed the exertion of practitioners, and have stimulated them to inquire into its nature, and the most successful mode of treating it.

The ancients do not seem to have had any very accurate views with regard to scarlatina.

Various authors, from an early period of the sixteenth century, downwards, mention an ulcerated sore throat, accompanied with a scarlet efflorescence on the surface of the body, as fre-

quently desolating different parts of the continent of Europe.

Sydenham describes scarlatina, as we often see it, to be a mild disease, requiring only common attention, quiet, and simple diet; and more likely to be aggravated than relieved, “by the nimia medicæ diligentia.” p. 225. editio tertia, London, 1705.

Huxham and Fothergill afterwards wrote on scarlatina, and the ulcerated sore throat; and, since their time, many British and foreign physicians have published their sentiments with regard to this disease, and have generally spoken of it under the title of scarlatina anginosa.

These different accounts of scarlatina have given rise to much nosological discussion respecting the identity of the disease, as described under different names. Little doubt is now entertained on the subject, so far as scarlatina and scarlatina anginosa are concerned. It appears to be admitted, that the affection of the throat in the latter may give a variety, while the diseases are

the same in their origin, progress, and termination.

Greater uncertainty prevails in regard to this question, respecting the ulcerated sore throat, or *cynanche maligna*, the name by which it is now generally known. This very name may have contributed to confirm the opinion, that it is a distinct disease from *scarlatina*; an opinion which, sanctioned by authors of respectability, and by our intelligent and latest nosologist, has been, and is still prevalent.

It is altogether foreign to my purpose to engage in this controversy; and the more so, as I apprehend that the distinction begins to lose ground, as our knowledge of the disease becomes more comprehensive and accurate. The time may not be far distant, when *scarlatina* will be received as the generic disease, the full history of which will include the more aggravated symptoms as they appear in *scarlatina anginosa*, and in *cynanche maligna*; in the same manner as the history of *variola* comprehends the varieties of the distinct and of the confluent small-pox. Indeed, Dr Willan, in his description of *Cuta-*

neous Diseases, edition 1805, page 254, adopts this opinion decidedly. “ The generic term, *Scarlatina*, comprises three varieties, which may be denominated *scarlatina simplex*, *scarlatina anginosa*, and *scarlatina maligna*.” And again, page 281, “ It is truly singular, that the slightest of all eruptive fevers, and the most violent, the most fatal disease known in this country, should rank together, and spring from the same origin. Experience, however, decides, that the simple scarlet fever, the *scarlatina anginosa*, the *scarlatina* (or *angina*) *maligna*, and the scarlet ulcerating sore throat, without the efflorescence on the skin, are merely varieties of the same disease.”

Scarlatina, as an epidemic, does not always assume precisely the same appearance. This diversity depends, in part, upon the varying nature and constitution of *scarlatina* itself, independently of all extrinsic circumstances ; in part upon certain contingencies, which are common to all the inhabitants of a whole district of country,—such as the season of the year, the temperature of the air, the kindliness or inclemency of the weather, together with other unknown qualities of the atmosphere ; and in part upon circumstances

which apply to individuals subjected to the disease,—their general habit of body and constitution, their particular state of health at the time of the attack, and their situation with respect to lodging, ventilation, and cleanliness.

These circumstances concur in modifying the character of the epidemic ; and, while they introduce a variety in the symptoms of scarlatina, they likewise point out the necessity of making a corresponding change in the method of cure, and of accommodating our practice to the particular nature of the case.

Hence different opinions have been entertained of the nature of scarlatina, and apparently discordant methods of cure have been proposed. Undoubtedly varying epidemics of scarlatina have led to the practice of blood-letting, in some instances, and to the rejection of it in others ; to the adoption of emetics and of blisters, by some practitioners, while others neglect and positively forbid them. It is owing to the same cause that cinchona is warmly recommended, and almost exclusively trusted, for the cure of scarlatina ; while, on the other hand, it is reprobated, as

tending to induce sloughs, and putrid ulcers in the throat; which it was expected to have obviated, or removed. In like manner, purgatives have been condemned as useless, if not dangerous ; and lately, the affusion of cold water over the surface, or the ablution of the skin, by means of tepid water, have been recommended and practised in scarlatina, according to circumstances, by men whose opinions have great weight and authority.

Thus the young and timid practitioner is distracted, and at a loss what course to pursue, that he may embrace a safe and decided line of conduct. It will be a difficult task to dispel the clouds that overshadow medical practice in scarlatina. The only way of accomplishing it, will be to give a full statement of the leading symptoms of the different epidemics noticed by authors ; and to appropriate to each the general and topical remedies which they require. Whoever embarks in this undertaking, and executes it with success, will render an useful service to the public.

These reflections occurred to me, upon turning

my thoughts towards the subject of scarlatina ; and I conceive them of sufficient importance to merit the attention which I have bestowed upon them.

I proceed now to the proper object of this paper, in prosecuting which, I beg to be understood as considering scarlatina, and scarlatina anginosa, to be the same disease, using always the term scarlatina as including both. And, in compliance with common custom, and for a reason which will afterwards appear, I shall treat of this modification of the disease separately from cynanche maligna, of which I shall take notice in the sequel.

Scarlatina.

An inflammatory diathesis frequently prevails on the first attack, and during the early period of scarlatina. For this reason, venesection has been ranked, by some practitioners, among the remedies which ought to be employed ; and it is said to have been practised with advantage. Possibly,

too, the existence of the inflammatory diathesis may have disposed others to give purgative medicines more freely in scarlatina than in typhus. But this practice has not been universal; for many physicians do not admit the good effects of purgatives, while others deny them altogether, and consider them to be highly prejudicial, by inducing a dangerous and fatal tendency in the disease.

This question, one of great importance in practice, is not, as yet, satisfactorily decided; although I think the opinion gains ground, that purgatives are useful in scarlatina. Many years ago, when the prejudices against them were more prevalent than they are at this time, I ventured to employ them. My doing so was, indeed, a necessary consequence of the benefit I had experienced from purgative medicines in typhus. I had learned, that the symptoms of debility which take place in typhus fever, so far from being increased, were obviously relieved by the evacuation of the bowels. I was, therefore, under little apprehension from them in scarlatina; and I have never, in a long course of experience, witnessed sinking and fainting, as mentioned by some au-

thors, and so much dreaded by them ; neither have I observed revulsion from the surface of the body, and consequent premature fading, or, in common language, striking in of the efflorescence, from the exhibition of purgatives. Accordingly, in treating scarlatina, I have confided much in the use of purgative medicines ; and no variety of the disease, as appearing in different epidemics, or in the course of the same epidemic, has hitherto prevented me from following out this practice to the extent which I have found necessary.

I have observed the pungent heat of surface, violent headach, turgescence of features, flushing of countenance, and full and quick pulse, the earliest symptoms in some epidemics of scarlatina, and which may have suggested and warranted the practice of blood-letting, to be quickly subdued by one or two brisk purgatives. Full purging is not required in the subsequent periods of the disease, in which the sole object is to remedy the impaired action of the intestines ; to secure the complete and regular expulsion of their contents ; and thus to prevent the accumulation of feces, which never fails to aggravate

the symptoms, and to prove the source of farther suffering to the patient.

It is generally, I believe, admitted, that purgative medicines are useful in removing dropsical swellings, the consequence of scarlatina, and are given with this view towards the decline of the disease, when the weakness of the patient is often very great. I conceive that purgatives also afford a means of preventing this swelling, and other derangements of health ; and for this reason I give purgatives during the fever, when the strength is not altogether broke down, and for some time after convalescence has commenced.

The termination of scarlatina is generally doubtful, particularly as to the dropsical tendency, in respect of which the mildness or severity of preceding symptoms afford no certain prognosis. I have been involved in the greatest distress by the supervention of a fatal dropsy, upon the termination of scarlatina, apparently mild on the first attack. Practitioners, therefore, in treating scarlatina, cannot be too much on their guard against unexpected changes, and

unfavourable appearances ; they ought never, even in the slighter cases, to lose sight of the *diligentia medici*, although Sydenham seems to ridicule this, by applying to it the epithet “ *nimia* ;” and I am satisfied that they cannot exercise this diligence better, than in the due and regular exhibition of purgative medicines.

Besides these motives for the exhibition of purgatives, I have observed, that the febrile state in scarlatina is more apt to induce costiveness, and to change the nature of the contents of the bowels, than it is in typhus ; for in most cases of scarlatina, the feces have an unnatural appearance, and in general a peculiarly fetid smell.

The same activity, however, in the exhibition of purgative medicines, is not required in every epidemic, and in every case of scarlatina. In some instances, the belly is moved with ease, and, in others, not without difficulty. Scarlatina was frequent in Edinburgh, in autumn 1804, and in winter 1804-5. In this epidemic, as will be seen from the cases contained in the Appendix, p. 55, the bowels were peculiarly constipated, the termination in dropsy was frequent, and,

from this circumstance the mortality was great. I have not ascertained to what this different state of the bowels in scarlatina is to be ascribed. But on whatever cause the difference depends, it will be necessary for us to adapt our practice, in the use of purgatives, to the nature of the prevailing epidemic.

It is not, perhaps, of great moment, to be solicitous about the selection of purgative medicines. In general, I have chiefly employed those which I have mentioned in my observations on typhus. Children cannot be always easily induced to take medicines of any kind. Submuriate of mercury, may, on this account, be proper for them. We ought, however, to be on our guard against too great an affection of the mouth, from the necessity of frequently repeating the mercury.

In scarlatina, as in typhus, we should keep in view the procuring the effect of purgatives during the day, and the avoiding, in this manner, the disturbance of the sick in the night-time. It is of moment to examine the feces, to ascertain their state and their quantity, circumstances ne-

cessary to determine the subsequent dose of the purgative, and the frequency of its exhibition.

The use of purgative medicines in scarlatina does not supersede the other sources of relief and comfort, which have been found proper in the treatment of the disease, and which our patients, or their friends and attendants, may expect, and which the habits of practitioners may suggest. Upon a dispassionate review, however, of the whole of the present inquiry, I feel myself at liberty to say, that, under the regulated exhibition of purgative medicines, conjoined with personal cleanliness, and access to pure air, I have not found the necessity of employing other remedies to be great, and certainly not so urgent as I at one time thought it to be.

In corroboration of these my sentiments, I give, in the Appendix, p. 55. the cases of a few of my patients in the Royal Infirmary, who laboured under scarlatina; also, p. 66, a narrative of an epidemical scarlatina which prevailed in Edinburgh in 1804-5, as it appeared among the children in George Heriot's Hospital; and, at p. 72, I adduce the authority of respectable authors

who approve of the exhibition of purgative medicines in scarlatina.

Cynanche Maligna.

The generally received opinion that scarlatina and cynanche maligna are distinct diseases, has been lately controverted. Had this distinction been well-founded, a different practice suited to each must, one would think, have been adopted. It is true, that evacuating medicines are used with more caution in cynanche maligna than in scarlatina ; while high stimulants are thought to be more appropriated to the former than to the latter. This, however, is no more than a variety of the same practice, applicable to the same disease, according as it is more or less virulent in different epidemics, and in particular cases. This practical view of the question constitutes the identity of scarlatina and cynanche maligna, independent of the proofs which the history of the disease affords.

I have declined, however, to enter upon any

argument on this subject, that I might be at liberty to consider scarlatina and cynanche maligna separately, lest any doubt should arise respecting the utility of purgative medicines in scarlatina. For while in this, the more simple form of the disease, almost every one considers these medicines to be dangerous, they are more universally condemned in cynanche maligna. Had I therefore spoken in a general way, and recommended purgative medicines in all the varieties of scarlatina, my proposal would have been received with distrust, and the practice might have been neglected and passed from, without a trial of its expediency.

I have stated my practice of exhibiting purgatives in scarlatina, and proceed to give my opinion respecting it, in relation to cynanche maligna.

The progress of cynanche maligna is sometimes so rapid as to preclude the interposition of any medicine whatever. This circumstance, along with the extreme debility which attends it, has raised a formidable objection to evacuations of any kind in the treatment of it, and particu-

larly to that procured by purgative medicines. It would indeed appear, that this objection has been urged with effect against the use of purgatives, even in scarlatina, in consequence of the connexion which had been observed to subsist between it and cynanche maligna; for it was imagined, that the danger from cynanche maligna which supervenes upon scarlatina, a supervention not unfrequent, would be increased, in proportion to the debility previously induced by the purgatives used in scarlatina. The restricted use of purgative medicines, however, to the extent of unloading the bowels only, does not increase this debility, while it relieves the symptoms of the general fever; and may thus prevent either its termination in cynanche maligna, or alleviate the attack.

Writers also condemn purgatives in cynanche maligna, from an apprehension that they serve to diffuse the acrid matter, descending from the throat into the stomach, over the whole surface of the intestines, and thus to increase the source of contagion, and to aggravate the irritation which arises from the presence of this acrid matter. But, in stating this objection, they do not

consider, that this matter accumulating, and becoming more offensive, in consequence of retention in the stomach and bowels, will produce greater mischief, and greater irritation, than can possibly proceed from the gentle operation of a purgative medicine, while they lose the benefit ensuing from the movement and expulsion of an acrimonious, feculent mass.

An exhausting diarrhœa, or even a dysentery, it is said, are troublesome and common consequences of cynanche maligna; on which account purgatives are conceived to be injurious. But I cannot see the force of this objection. For were I to devise a means of preventing these consequences, or of removing them when they had taken place, none more likely would occur to me, than the use of those very purgatives, which are thus so dogmatically proscribed. While I employed them, however, I would carefully limit their effect to the express purpose of unloading the bowels, and shun the inconvenience of inducing weakness, by full purging.

Under these impressions, I have formed a fa-

favourable opinion of the utility of purgative medicines in cynanche maligna. But let me here caution the reader, that I have, in this instance, departed from the rule which I had formed to myself. It is a theoretical opinion on my part, and not so fully supported by experience, as to enable me to deliver it with confidence.

This opinion, however, is not exclusively mine; it is that of respectable authors, and is supported by their practice.

Huxham, in a dissertation on the malignant ulcerous sore throat, London, 1757, remarks, page 297, “ However improper purging might be at the beginning of this distemper, gentle easy cathartics, as rhubarb, manna, &c. were necessary at the end, to carry off the putrid colluvies of the intestines, which otherwise protracted the feverish heats, and occasioned great weakness, want of appetite, tumid bellies, and great obstruction of the glands.”—“ But in general,” page 295, “ after a purge or two, the sick soon recovered a keen appetite, strength and spirits; many however required frequent purging.”

In the Gentleman's Magazine for June 1772, an anonymous correspondent, Mr Rodbard of Ipswich, an ingenious practitioner and respectable man, as the late Dr Ford, physician in Chester, has informed me, mentions an epidemic scarlatina which prevailed at Ipswich. His letter on this subject is little known, and is not readily accessible, as the depository of it has become scarce, and is generally to be found only in public libraries: I insert it therefore at length for the gratification and information of my readers.

“ MR URBAN,

“ If the following comports with the design of your useful collection, please to give it a place the first opportunity, and you will oblige a constant reader.”

“ To Dr ———, London.

“ SIR,

“ Notwithstanding you are an absolute stranger to me, your character as a physician, and as a candid, humane, and benevolent gentleman, has emboldened me to trouble you with the contents

of this, without any further apology than the goodness of the intention.

“ The ulcerated sore throat, and scarlet fever, has been very rife in this place and the neighbourhood, for some months past, and has been, in a considerable number of instances, fatal. It has, in every respect, answered the description given of it by Dr Fothergill ; and therefore a repetition of the symptoms and appearances would be needless. I shall only relate what appears to me to be the predisposing cause, the proximate cause, the *pabulum morbi*, the treatment I have given it, and the success.

“ The predisposing cause is, whatever generates a quantity of acrid bile in the *primæ viæ*.

“ The proximate cause is, the sudden transition from heat to cold, and the contrary. This has been so very evident, that whenever the wind has changed from the south or west to the north or east, a considerable number of people have been instantly seized with the disease.

“ The *pabulum morbi* is, acrid bile. This is

certainly known by the immediate cure of the sick, who apply very soon after the seizure, and take such medicines as act smartly on the stomach and bowels; by the great relief all others find by vomiting and purging; and is confirmed by the contents of the evacuations, which are little else but acrid or putrid bile.

“ The treatment I have given the sick is, immediately to evacuate them, in proportion to the strength of the patient, the violence of the symptoms, the time of the disease, and the particular state of the constitution.

“ The evacuating medicines I have given, are the following :

“ Recipe—Ras. c. c. antimon. crud. pulv. an. p. æ. calcinentur simul in crucibulo donec fumi sulphuris evanescent, et regulus antimonii manifestus sit; deinde ab igne remove, et in pulverem subtilissimum redige.

“ Recipe—Pulv. supradict. partes tres.—Mercurii dulcis sexies sublimati, et subtilissime triturati, partem unam. Misce.

“ Of this I have given from half a scruple to half a drachm, to adults, and have found it constantly to answer the intention. But to children, I have given the *mercurius dulcis* only, from five grains to a scruple; and if the symptoms are very violent, and the child very robust, I have given even half a drachm with the greatest success. After the sick has had several stools, I gave him the following julep :

“ Recipe—*Mann. aq. pur. uncus septem solut. unciam, crem. tartar. drachmam, aq. nucis mosehat. unciam dimidiam. M. Capiat cochlearia tria, quartis horis, if he is an adult; if a child, according to his age and strength. It is an agreeable medicine, and answers the intentions of keeping the bowels lax, the bile insipid, and the mouth and fauces quite clean.*

“ If the patient is in the first stage of the disease, I direct him to gargle frequently with *Spiritus Mindereri* in cold water, which prevents an ulceration : if in the second stage, with *Spiritus Mindereri, tincturæ myrrhæ uncia dimidia, decocti hordeati, unciis septem. M.* If in the third, and the sloughs begin to separate, with *mel rosar. tincturæ myrrhæ,—corticis Peruvian. a. uncia di-*

midia, decoct. hordeati unciis septem, M. and made just tepid.

“ If the ears are affected, I have used the last mentioned mixture, as soon as they discharge, just tepid, as an injection, several times a-day.

“ After the sloughs are all off, and the fever gone, I have found it necessary, in some few cases, to give of the following tincture ; Recipe—
Infus. corticis Peruviani Huxhami, unciam unam et dimidiam,—Rhabarbari spirit. unciam dimidiam ; drachmam unam, vel drachmas duas, bis in dies, horis medicinæ in aqua pura. *P. wh.*

“ The liquors I have used, have been water-gruel, barley-water, chicken-water, sage tea, rosemary tea, or baum tea, occasionally. Of these I have recommended the sick to drink freely, cold or just tepid ; keeping them at the same time cool, and admitting fresh air freely into the room, remembering always Piso’s maxim, “ putredo fit a calore alieno et interno.”

“ The success has been beyond my most sanguine expectations ; I have had considerably

more than one hundred patients, and have not buried one."

"Ipswich, June 3."

"This letter was written some months ago, since which time the number of patients have increased to near three hundred, with the same success."

The facts set forth in this letter afford abundant evidence of the safety and efficacy of purgative medicines in cynanche maligna ; for the epidemic herein described appears to have been of this nature.

Mr Rodbard verifies my observation, that different epidemics of scarlatina require a variety of the same practice. In the scarlatina of 1772, at Ipswich, the bowels appear to have been easily moved ; I believe, however, the gentle purgative, employed in the course of that epidemic, for I do not take into account the highly active one given in the first instance, would have been of no avail in the scarlatina which prevailed in Edinburgh in 1804 ; as will be evident from my

narrative of this epidemic, as it appeared in George Heriot's Hospital, Appendix, page 66.

Dr Willan, in his description and treatment of cutaneous diseases, gives extracts from an account of scarlatina, as prevailing among the children at Ackworth school, drawn up by Dr Binns. In a note, page 281, edit. 1805, we have a description of this epidemic, as it affected the throat. "The affection of the throat has occurred with us in every possible state; mere erythema, sometimes with a swelling of the tonsils; aphthous specks; deeper ulcerations, with white sloughs; ash-coloured sloughs, which I consider as gangrenous; also darker-coloured sloughs, with extreme fætor."

On the subject of wine as a remedy, Dr Binns, among other remarks, makes the following, pages 364, 365. "It is impossible to specify, with certainty, the quantity of wine taken by individual patients; but, from the general consumption, when a number of bad cases occurred together, it appeared that children about twelve years of age must have taken each a bottle of red port and a bottle of raisin wine, in twenty-four hours,

for 'several successive days.'—" Although the state of the pulse, and other symptoms, were, in many cases, such, that a small proportion of bark and wine were sufficient; yet, in other instances, the debility was so great as to require even the addition of brandy to the red port. Sometimes strong brandy and water, sometimes brandy unmixed, was given with comfort and advantage to the patient."

In this epidemic, which the above symptoms, as well as the high stimuli necessary in conducting the cure, evince to have approached, if not in some instances to have emulated cynanche maligna, Dr Binns speaks thus of laxatives, page 357 : " My acknowledgments are due to Thomas Oxley, of Pontefract, not only for his frequent attendance, but for his removal of a prejudice against laxatives in the early stage of the disease, imbibed from various authors, and confirmed by the dreadful consequences I had seen when a diarrhœa came on in this fever. By his persuasion, small doses of calomel and other laxatives were occasionally administered; and, so far from producing injury, I believe that, by evacuating the acrid matter, which is often swallowed, they

had a tendency to prevent the excoriations of the intestinal canal, and the consequent diarrhœa which I dreaded. But it should be remarked, that particular care was taken to support the patient during the operation.”

CHAP. VI.

OBSERVATIONS ON THE UTILITY AND ADMINISTRATION OF PURGATIVE MEDICINES IN THE MARASMUS WHICH APPEARS IN CHILDHOOD AND EARLY YOUTH.

I COMPREHEND under the general title, Marasmus, a variety of symptoms which affect the young of both sexes.

A sluggishness, lassitude on slight exertion, depravity and loss of appetite, wasting of the muscular flesh, fulness of the features and paleness of the countenance, swelling of the abdomen, an irregular and generally a costive state of the bowels, a change in the colour and odour of the feces, fetid breath, swelling of the upper lip, and itching of the nose, mark the beginning of the disease.

When these symptoms have continued for some time, they are followed by alternate paleness and flushing of the countenance, heat and dryness of skin, feeble and quick pulse, thirst, fretfulness, increasing debility and disturbed sleep, during which the patients grind or gnash their teeth, and are subject to involuntary starting, and twitching of different muscles.

Every case of marasmus does not necessarily include all the symptoms which I have enumerated. Different combinations of them give a variety of the disease, which is, however, in general, readily known and distinguished.

Marasmus appears most commonly among weak and infirm children, whether they are so from delicacy of constitution, or from incidental causes. It is particularly prevalent in large and populous cities, where children are deprived of ready access to exercise in the pure air, and sicken and pine in the nursery; or when they are confined in crowded and airless school-rooms, whither they are sent, partly for the purposes of education, and partly, to use a common phrase, with the view of being kept out of harm's way.

Children also, who are employed in manufactories, where their occupation and confinement in impure air are such as to weaken and enervate them, are liable to be attacked with this disease. Irregularity in diet and improper food also give rise to marasmus. We accordingly observe it to prevail most commonly in autumn, the season which affords opportunity for eating unripe fruit and vegetable articles from the garden.

In proof of the operation of these causes, I remark, that I have held the office of Physician to George Heriot's Hospital for thirty-eight years. During this long period, I scarcely recollect an instance of this marasmus among the children entertained in that institution. This may be attributed to the healthy site of the building; to the cleanliness and free ventilation of every part of it; to the wholesome nourishing food of the children; and to their exposure to pure air while enjoying their infant sports.

Marasmus has been generally attributed to the presence of worms in the alimentary canal. This supposition, however, is questionable. *Ascaris*,

Tenia, and Lumbricus, are the worms most commonly found in the human intestines.

Ascarides, which are often passed in great numbers by children when at stool, are not accompanied by the symptoms of marasmus. Except an itching about the anus, they give little other uneasiness.

The tenia or tape-worm, the presence of which is known by peculiar symptoms, which are the source of much suffering in after periods of life, is altogether unknown in infancy and childhood.

The lumbricus, or round worm, therefore, must be the generally supposed cause of the symptoms of marasmus. Medical gentlemen, who have practised in tropical climates, speak much of the lumbricus, and mention the number of them that is occasionally passed to be very great. There may be something in the climate, soil, or state of the air of these regions, in the mode of life or constitution of the inhabitants, with which we are unacquainted, which may account for this circumstance. But in our cooler latitudes, no

such instances of numerous lumbrici have been noticed. On the contrary, after the best directed course of anthelmintic medicines, when the symptoms of the disease are going off, no lumbrici have been seen, unless we admit, that the worms destroyed by the efficacy of the medicines, constitute the unnatural and fetid feces which, in such instances, are voided in great abundance.

This admission, however, is not to be readily granted; for similar feces are passed upon the exhibition of an early purgative, and before any specific vermifuge is employed.

Farther, the presence of lumbrici in the bowels is by no means an uniform cause of bad health. They have been known to exist in the intestinal canal without any disease ensuing. These instances are not rare, and are not confined to childhood. They militate against the received opinion, that lumbrici, within the intestines, are the cause of marasmus; for if they are so in a single case, they should be so in every one.

This opinion, however, that worms exist in

the intestines, and exert a baneful influence on the health, has been so prevalent for ages, that a great many anthelmintic medicines, some peculiar to the nursery, others to the regular practitioner, have been mentioned and extolled. Of these, some have been considered as specific poison to the insect, and others are conceived to destroy it by mechanical triture. Most of them have had their partisans for the day, and have passed in succession, through the ordeal of experience, into oblivion. The utility of such anthelmintics as have been found to be most beneficial, has, in my opinion, been in proportion to the purgative powers which they possessed.

When I consider the languor and lassitude which precede this marasmus ; when I recollect the constitutional or acquired debility of those who are more particularly exposed to be affected by it, instead of adopting the common opinion, of its being occasioned by worms, I am more disposed to think that a torpid state, or weakened action of the alimentary canal, is the immediate cause of the disease ; whence proceed costiveness, distention of the bowels, and a peculiar

irritation, the consequence of remora of the feces. I have accordingly been long in the habit of employing purgative medicines for the cure of this marasmus; the object is, to remove indurated and fetid feces, the accumulation perhaps of months; and, as this object is accomplishing, the gradual return of appetite and vigour mark the progress of recovery.

The history of the disease, from the first indisposition, to the appearance of more urgent symptoms, disposes me to consider it as consisting of two stages or periods; the incipient, and the confirmed. The first period commences with the disease, and continues to the accession of the febrile symptoms. These usher in the confirmed stage, which continues to the end. This is not a frivolous remark; it is of use in practice.

In the incipient stage, the bowels are not altogether torpid and inactive, neither are they overloaded with accumulated feces. Mild purgatives, therefore, repeated at proper intervals, effect a cure. They preserve the bowels in proper action, carry off feces which had begun to be

offensive and hurtful, and prevent farther accumulation.

Neglect, on some occasions, and too great confidence in inert medicines on others, allow the confirmed stage of marasmus to steal on imperceptibly. Manifest danger now threatens the young sufferer, whose remaining flesh and strength are rapidly wasted by the supervening fever; prostration and depravity of appetite withhold necessary nourishment, while the more inactive bowel, and greater bulk of feculent matter, throw additional difficulties in the way of a cure. Under these circumstances, I adopt active practice, in the view of stimulating the intestines, and of putting the collected mass in motion without delay. I find these ends are best obtained by giving small doses of the purgative medicine which I employ, and by repeating these frequently; so that the latter doses may support the effects of preceding ones.—When the bowels are once opened, stronger purgatives, given at longer intervals, will accomplish the cure.

In selecting purgative medicines, we must flat-

ter the taste of our young patients. Powder of jalap is not altogether unpleasant. The mild neutral salts, dissolved in a suitable quantity of beef tea, are also convenient purgatives ; but calomel will prove, on several accounts, the most certain and useful remedy of this kind. I observe calomel to be equally useful in both states of the disease ; but great attention must be given during the exhibition of it, without which, as the fetor of the breath prevents us from recognizing the mercurial fetor accurately, the mouth may be affected unnecessarily and unexpectedly.

While I thus give appropriate purgative medicines, I find it necessary, in order to have full information of their effects, to inspect daily what is passed at stool. The smell and appearance of the feces are a criterion of the progress we make in the cure, and direct the farther administration of the purgatives. This inspection is the more necessary, as we cannot expect the information we want from our little patients ; and we will often look for it in vain from the attendants, whose prejudices, and whose ignorance of our views, prevent their seeing the propriety of the inquiry:

During the prevalence of the disease, the feces are dark and fetid ; they vary from a hard consistence to that of clay, and are often fluid ; and such they appear upon the first exhibition of the purgative medicines. I observe that the recovery of the sick keeps pace with the return of feces of natural colour, form, and smell ; a change which the repetition of purgatives does not fail to produce.

While purgative medicines are given after this manner, in the confirmed stage of marasmus, in which the obstinacy of the disease is sometimes great, and the danger attending it imminent, nourishing food, of light and digestible quality, and suited to the taste of the patient, and the moderate use of wine, are much wanted.

For some time after the symptoms have disappeared, it is expedient to continue a mild stimulus to the bowels. As they have recently suffered, and have been weakened by over-distention, they are apt to favour subsequent accumulation of feces, the forerunner of a relapse, which is to be dreaded the more, as the patients have been weakened by the previous disease.

This gentle solicitation of the alvine evacuation, for it ought to be gentle, is not attended with danger ; on the contrary, it is the greatest promoter of recovery in this case, with which I am acquainted. It relieves the stomach, and improves the appetite and digestion. Besides, nothing more is intended by this practice, than to establish a regular action of the bowels, after long constipation, by procuring daily one or two easy motions, which are indeed at all times necessary to the healthy condition of childhood.

With this precaution, I do not feel the necessity of employing tonic and bracing medicines to complete the cure ; this object is readily obtained, in general, by the use of light nourishing food, and by the patient being much in the open air.

I do not, however, say that strengthening medicines may not be useful towards the close of the disease, and many practitioners set a value upon them. Lime-water, infusions of vegetable bitters, and chalybeates, are of this description ; and, provided they do not, by any peculiar effect on the stomach, prevent nourishment being taken, will advance the return of the tone and vi-

gorous action of the stomach and alimentary canal.

As marasmus proceeds from symptoms of slight indisposition, through a series of others which become daily more and more obstinate and dangerous; as the first deviation from health is easily obviated by the stimulus of purgative medicines, which brings the sluggish bowels into regular action, and evacuates their contents; and as the disease attacks the young and thoughtless, who can hardly explain their feelings, it behoves mothers, nurses, superintendants of nurseries and of manufactories, to whom the care of the young is committed, to watch over their charge with assiduity. Prostration and depravity of appetite, a changing complexion, tumefaction of the abdomen, scanty and unnatural stools, and fetid breath, indicate approaching danger. When these, therefore, are observed, assistance should be asked; by the prompt interposition of which much eventual distress, and even death itself, may be prevented.

But other considerations weigh with me also, when I call for this assiduity. Marasmus has a close connexion with other formidable diseases,

and either precedes or seems to accompany them : of these, I shall at present notice two, hydrocephalus and epilepsy.

Hydrocephalus internus, the bane of infancy and of childhood, a disease big with much suffering, and of a fatal tendency, has at all times occupied the attention of physicians. They have endeavoured to investigate its nature, to assign the causes which induce it, and to propose curative indications. Different sentiments on these subjects have led them to employ numerous and discordant remedies. Nevertheless, even now they are not agreed as to the causes of hydrocephalus, so involved are these in obscurity. Neither have they made the most distant approaches towards the discovery of a certain remedy for it.

This much is known, that hydrocephalus often steals slowly on, with symptoms resembling those of incipient marasmus. Till some better theory, therefore, is established, it is not unreasonable to suppose, that the marasmus, of which I have treated, may on some occasions give rise to hydrocephalus, by impairing the vigour of the con-

stitution, and by favouring serous effusion into the ventricles of the brain.

This conjecture merits the greater attention on this account, that while the symptoms of hydrocephalus resemble those of incipient and even of confirmed marasmus, they have been removed by the diligent exhibition of purgative medicines. The truth of this observation has been repeatedly confirmed in my private practice; and it affords an additional reason for the exercise of watchful attention to prevent the confirmed state of marasmus, which may, in more instances than we are aware of, have been the forerunner, if not the cause of hydrocephalus.

Epilepsy, than which no disease is so afflicting to the patient, and perplexing to the physician, often appears in childhood. It acquires a hold, and is confirmed by the repetition of the fits, till their frequency and the force of habit fix it, and make it a constitutional disease for life.

It is not my present purpose to inquire in what manner the functions of the organs more immediately affected by epileptic paroxysm are

influenced, so as to give permanency to the disease. The uncertainty of the theories proposed on this subject, and the little benefit that arises from them in practice, hold out little inducement to enter on the discussion.

It is however, I believe, generally understood, that the first attacks of epilepsy are not always idiopathic, but are frequently the effect of particular irritation of the mind or body. There are many instances of irritation of the body inducing epilepsy. When no other is evident, the loaded intestine, and the change induced on its contents in the course of the marasmus, of which I have spoken, may be suspected of giving the irritation in question.

In fact, practitioners have had this circumstance in view; for they enumerate worms in the intestines, or marasmus, as I understand their language, among the causes of epilepsy. Surely, therefore, this consideration suggests another cogent reason for watching the rise and progress of marasmus. And it will induce us, on the first attack of epilepsy in children, arising from an uncertain cause, to set on foot the most

decided and active course of purgative medicines ; and not peradventure to allow the disease to strike root, while we are idly employed in the exhibition of inert and useless vermifuge medicines ; or are groping in the dark in quest of other causes of the disease, or of uncertain remedies for their removal.

In the Appendix, page 75, I give the history of cases of marasmus from the records of the Royal Infirmary, and the narrative of a case of it from the Trades Hospital, page 86, and of one, by Mr Stewart, surgeon at Gogar, page 88. I insert also, pages 90, 92, communications from Mr James Russell, and from Mr Benjamin Bell, in confirmation of the connexion that subsists between the marasmus of infancy, and hydrocephalus. The practice therein set forth coincides with, and corroborates, the sentiments I entertain respecting marasmus, as inducing, or as being connected with, hydrocephalus internus. Stronger and more decided proofs of the utility of purgatives given in these instances, which had so much of the character and appearance of hydrocephalus, cannot be desired. They inspire confidence in the prosecution of a simple practice, which will

rob this scourge of infancy, of childhood, and early youth, of much of the terror which its most distant approach has been wont to excite, by obviating, in many instances, a tendency to a disease, for which, when once fully formed, we are without a remedy.

CHAP VII.

ON THE UTILITY AND ADMINISTRATION OF PURGATIVE MEDICINES IN CHLOROSIS.

THE young of either, but particularly of the female sex, are exposed, about the age of puberty, to a series of symptoms, which, although slight in the beginning, become, by slow degrees, abundantly distressing and severe. They are ushered in by a disagreeable breath, or exhalation from the mouth, not unfrequently of a feculent odour; by acid and fetid eructations, by prostration, and depravity of appetite, marked by an aversion to usual food, and a desire for substances which are not digestible, such as chalk, cinders, sand. These symptoms are generally preceded by costiveness, which prevails throughout the disease.

A rosy complexion now gives place to a pale, and sometimes to a greenish, and at other times to a yellowish colour of skin. The lips and gums exchange their vermilion tint for a death-like paleness ; the eyes are dull, and the inferior part of their orbits is puffy, and of a dark hue ; the motions become languid and feeble ; the pulse, which is generally small and slow, is readily excited to a quick and irregular beat ; palpitation of the heart, and hurried and labouring respiration are brought on by slight mental agitation, or bodily exertion ; syncope often occurs ; head-ach, vertigo, dulness, and impaired memory and judgment afterwards supervene. To these succeeds a peevish and recluse turn of mind, which makes the unhappy sufferer shun society, and court darkness and solitude.

In the progress of the disease, the flesh becomes loose and flaccid, the urine is diminished, and the perspiration seems to be checked. Serous effusions into the cellular membrane, produce at first œdema of the lower extremities, and afterwards anasarca. Languor and debility continuing, death, in some instances, closes the scene.

Authors have arranged these symptoms indiscriminately under different names, Chlorosis, Leucophlegmatia, and Cachexia. Chlorosis has attracted the notice of the earliest medical writers, and various opinions respecting its nature and causes have been entertained.

It is not perhaps necessary at this era, to consider at length the doctrines of the humoral pathology, which prevailed in physic from a remote period, and about which the Boerhavian school was so much occupied. The dogmata respecting spontaneous gluten, the lentor and fluidity of the blood, and the alkaline and acid acrimonies of the fluids, do not now arrest much attention. Even in the present improved state of chemistry, we are little able to ascertain the nature of the animal fluids, either in a state of health or of disease; so as to say, in what the former consists; or by what deviations the latter is introduced. Nevertheless, the above-mentioned symptoms of chlorosis have been referred to this supposed cachectic state of the juices; and, to promote a cure, recourse has been had to diluting, incrassating, and strengthening medicines, and to rectifiers of peculiar a-

crimonies. Accordingly, a crude, multifarious, and often inert practice has been adopted; little calculated for the speedy removal of a disease, which gains strength by delay, and which, in some instances, becomes quickly too formidable to be cured by any means that can be devised.

When the humoral pathology sunk in estimation, other opinions arose, on which the explanation of the symptoms of chlorosis, and the indications for its cure were founded.

As chlorosis generally appears about the age of puberty, and in the female, either before, or soon after the first flow of the menstrual flux, many have supposed the retention or suppression of the menses to be the immediate cause of the disease. This supposition, however, is liable to objections. We cannot ascertain the precise time, at which the retention of the menses may be considered as a circumstance connected with disease. The age of puberty is not the same in every female: chlorosis may therefore exist, long before the agency of the menstrual flux is felt in the constitution. But, opposed to this theory, a still more conclusive argument is

drawn, from the circumstance of chlorosis appearing occasionally among the more feeble and delicate of the male sex ; for although females are attacked more frequently and more severely with chlorosis, yet it is not peculiar to them.

For these reasons, this doctrine is now generally rejected. Another, founded on the state of the genital organs, occupies its place ; it comes from most respectable authority, and it has obtained many proselytes.

Dr Cullen thus expresses himself in paragraphs M, MI, MII, MIII, of his *First Lines of the Practice of Physic*, edition 1789 : “ These symptoms,” namely, some of those which I have enumerated above, and which the Doctor details, “ when occurring in a high degree, constitute the chlorosis of authors ; hardly ever appearing separate from the retention of the menses ; and attending to these symptoms, the cause of this retention, may, I think, be perceived.

“ These symptoms, manifestly, shew a considerable laxity and flaccidity of the whole system, and therefore give reason to conclude,

that the retention of the menses accompanying them, is owing to a weaker action of the vessels of the uterus, which therefore do not impel the blood into their extremities, with a force sufficient to open these, and pour out blood by them.

“ How it happens, that, at a certain period of life a flaccidity of the system arises in young women, not generally affected with such weakness or laxity, and of which, but a little before, they had given no indication, may be difficult to explain; but I would attempt it in this way.

“ As a certain state of the ovaria in females prepares and disposes them to the exercise of venery, about the very period at which the menses first appear, it is to be presumed, that the state of the ovaria, and that of the uterine vessels, are, in some measure, connected together; and as, generally, symptoms of a change in the state of the former appear before those of the latter, it may be inferred, that the state of the ovaria has a great share in exciting the action of the uterine vessels, and in producing the menstrual flux. But analogous to what happens in

the male sex, it may be presumed, that, in females a certain state of the genitals is necessary to give tone and tension to the whole system ; and therefore, that if the stimulus arising from the genitals be wanting, the whole system may fall into a torpid or flaccid state, and thence the chlorosis and retention of the menses may arise.

“ It appears to me therefore, that the retention of the menses is to be referred to a certain state or affection of the ovaria ; but what is precisely the nature of this affection, or what are the causes of it, I will not pretend to explain ; nor can I explain in what manner that primary cause of retention is to be removed.”

In the uncertainty in which Dr Cullen admits the affection of the ovaria, to which he refers suspended menstruation, as well as the causes of this affection, to be involved, he recommends, in conducting the cure of retention of the menses, to obviate particular symptoms, by restoring the tone of the system in general, and by exciting the action of the uterine vessels in

particular: the same means being subservient to the cure of chlorosis.

By this theory, Dr Cullen attempts to establish, that the retention of the menses, and chlorosis, are co-existent diseases, appearing about the age of puberty, and originating in a defective communication of a due stimulus from the genital organs, on which the tone and tension of the whole system depend.

Whilst I acknowledge the great importance of the sexual organs; while I perceive that they influence the character and disposition of the adult of every species of animals; yet I cannot help thinking, that these organs, and the doctrines of their functions, have had too great a share in our pathological reasonings, and too great weight, in directing our conduct in the cure of diseases. And having experienced the uncertainty of the usual means which these doctrines suggest, for the cure of chlorosis, and the utility of another mode of treating the disease, I have been led, greatly hesitating, to question the theory of the Cullenian school on this subject.

The assumption, that the state of the ovaria, and that of the uterine vessels have a connexion; and that the former has a great share in exciting the action of the latter, and in producing the menstrual flux; the presumption, that a certain state of the genitals is necessary to give tone and tension to the whole system, and that, if the stimulus arising from this state be wanting, the whole system may fall into a torpid, or flaccid state, whence chlorosis may arise; appear to be merely a begging of the question, and lead to no certain conclusion, as to the nature or cause of this state of the genitals, the supposed prime mover in the retention of the menses, and in the introduction of chlorosis; or to a knowledge of the means of curing either.

The partial and temporary suspension of the influence of the genitals, is supposed, according to this theory, greatly to affect the general system. But there are instances, where this influence is altogether and irretrievably lost; and where no disease ensues. Castrated and spayed animals suffer certain changes of constitution, but they retain the enjoyment of perfect health. And, in our own species, eunuchs, however much de-

graded in the estimation of society, in consequence of their emasculation, are neither a short-lived, nor an unhealthy set of men. Reasoning from this analogy, I do not understand how the influence of the female genitals can be so great, as that its partial suspension should occasion retention of the menses, or should induce chlorosis.

Another theory has been broached on this subject, which it elucidates by a reference to sexual desire. Insinuations, injurious to the purity of mind, and offensive to the modesty of the fair sufferers, have been thrown out. The medical moralist talks of the chlorosis amatoria, and follows up his notion with apposite counsel. Into what contradictions do the refinements of dogmatism lead us ! Can passion exist, when the organs which rouse it, have not been, as yet, evolved into action ; or, if evolved, have been afterwards rendered effete by disease ? What bounds can we set to regret, if, in consequence of this ungenerous and, as I think, groundless supposition, delicacy and reserve have allowed concealment to feed on the damask cheek, and to lead its pale victims to an early grave !

I could not avoid entering upon these discussions, which I have conducted with all brevity; I thought it was necessary to shew, that the doctrines on the subject of chlorosis, are neither so clear nor so well founded, as to warrant the conclusions which follow necessarily from them. In this manner, I prepare the reader for the candid consideration of what I have to propose; a candour perhaps not the less wanted on this account, that my opinion of the disease may appear at first sight too simple; and my practice too little adorned with the show of varied prescription.

It would have been fortunate, if medical inquirers had always followed the progress of diseases, step by step, and viewed them as a whole, from the first deviation from health to their termination. A contrary procedure has often betrayed them into confusion and error.

Thus in chlorosis, the doctrine of the cacoehymia of the juices, and that of the peculiar state of the genitals affecting the whole system with flaccidity and laxity, are evidently founded on the appearances which the disease exhibits, when it is fully formed; and from which appearances

also, it has its name; when, at the same time, the history of its incipient state has been little regarded.

The slightest attention to the general history of the disease evinces, that costiveness precedes, and accompanies the other symptoms. Costiveness induces the feculent odour of the breath, disordered stomach, depraved appetite, and impaired digestion. These preclude a sufficient supply of nourishment, at a period of growth when it is most wanted: hence paleness, laxity, flaccidity, the nervous symptoms, wasting of the muscular flesh, languor, debility, the retention of the menses, and suspension of other excretions, serous effusions, dropsy, and death.

This view of chlorosis is confirmed by the explanation which it affords of some circumstances connected with it. The feeble and delicate of either sex, in whom the languid action of the bowels readily gives place to costiveness, are more exposed to chlorosis than the robust. Females are, in general, more delicate, and, in certain ranks of life, are more sedentary than males; hence costiveness and chlorosis are more common

with the former than with the latter. It is well known, that the alvine evacuation is periodical, and subjected to the power of habit; if the regular call is not obeyed, the necessity for the evacuation passes away; and the call being again and again neglected, habitual costiveness is the consequence. Hence, from the feelings of the sex, and frequently from the want of proper opportunities, costiveness, and its attendant chlorosis, are more prevalent among girls than among boys. Again, the greater capacity of the female pelvis gives more room, for that part of the intestinal canal which is contained within it, to dilate, and, of course, to admit of greater accumulation of feculent matter, which in proportion to its remora, becomes more and more abundant, and more impacted. Hence costiveness is more obstinate, and chlorosis, and other diseases originating in costiveness, are more severe, and are of more difficult cure in the female than in the male.

Impressed with these considerations, and with a previous favourable opinion of the utility of purgative medicines, in other ailments, I, many years ago, adopted the use of them in chlorosis. I expected, by obviating costiveness, to remove

the stomachic symptoms, and, of course, others that depended upon them. I pursued this practice with the greater readiness, because I had experienced, on many occasions, the uncertain and protracted cure of chlorosis, by the remedies in common use.

Scarcely had I begun the exhibition of purgative medicines in chlorosis, when I had the satisfaction to find that the opinion, which I had formed of them, was well founded, and that they proved at once safe, and quickly salutary.

As chlorosis proceeds by slow degrees, from its commencement, to its confirmed state; so I found, according to the progress which it had made, that the bowels were more or less easily moved; for as the feculent matter is often accumulated in great quantity, so the expulsion of it is sometimes difficult. Great attention and assiduity, therefore, is requisite in the exhibition of purgative medicines in chlorosis, and the strength of their dose, and the frequency of its repetition, must be varied according to circumstances, which are best ascertained by the inspection of the alvine egesta. The practitioner who is not aware

of this, and who, yielding to the importunity of his patients, or to the caprice of their relations, does not steadily pursue this plan of cure, will be disappointed, his abilities will be called in question, and his practice vilified and neglected.

When the intestinal canal has been duly evacuated, recovery may be promoted by the interposition of tonic medicines. If such, however, abate appetite, and induce sickness, they will be of doubtful efficacy. In this case, the patient may be directed to trust to the use of nourishing food of easy digestion, and to frequent exposure to the open air, when the weather is good.

After all, I am not singular in this practice. The favourers of the humoral pathology have recommended a gentle purge, at intervals, to carry off whatever loads the intestines. Others advise the same practice, that the stimulus excited by the purgative may be communicated to the vessels of the uterus, which have connection with those of the rectum. But as the objects, in these instances, were only secondary, the direct good effects of purgative medicines seem not to have

been understood, or to have been lost in other views, directing other treatment.

In concluding this subject, I must observe, how much it behoves those who have the charge of young people, particularly of the female sex, to impress them with the propriety, nay, with the absolute necessity of attention to the regular state of the bowels ; and to put it in their power, by the use of proper means, to guard against constipation ; at the same time, to watch over them, lest, through indolence, they neglect a circumstance, which promoting, in the gay season of youth, the enjoyment of health and happiness, opposes a sure barrier against the inroads of chlorosis, always a distressing, and sometimes a fatal ailment.

The appendix, page 97, contains cases of chlorosis, which I treated in the Royal Infirmary. They illustrate the utility of purgative medicines in this disease.

CHAP. VIII.

ON THE UTILITY AND ADMINISTRATION OF PURGATIVE MEDICINES, IN VOMITING OF BLOOD.

VOMITING of blood is an alarming and often a distressful disease; but having been generally considered to be symptomatic of other affections, it has not found a place in any regular system of physic.

I do not propose to attempt a general history of vomiting of blood. But there is one variety of it, which attacks females, who are from eighteen to thirty years of age, and it rarely appears sooner or later than these periods, which I shall endeavour to illustrate.

As I confine my attention to this variety, the

observations which I am about to make, will not apply to vomiting of blood, which originates in organic affection of the stomach, and viscera connected with it, either as a constitutional disease, or as the consequence of previous irregularities and intemperance. I have seen several instances of this vomiting of blood, the cure of which is doubtful in the extreme, and difficult.

The attack of the hæmorrhagy, of which I am to speak, is preceded by great languor, and oppression, both about the chest and the præcordia; and by a sense of fulness of the præcordia; by cough, dyspnœa, and sometimes by pain of breast; by loss of appetite, headache, vertigo, and disturbed sleep; the eye is dull, the countenance is expressive of much distress, the pulse is feeble, and the bowels are constipated.

In this state of impaired health, a particular fit of sickness and nausea is the immediate forerunner of the attack of the vomiting of blood. The blood vomited is sometimes florid, and at other times black, and grumous. The quantity brought up at one time, varies from a few ounces, to a pound or more. The distressing symptoms

are relieved by this discharge of blood ; but are again aggravated, previously to the return of a similar attack.

This disease, under the usual management, is of uncertain duration, and of unequal severity.

The time of life, at which this hæmorrhagy takes place, and the circumstance of being peculiar to the female sex, have induced practitioners to imagine, that it is intimately connected with the menstrual flux ; the suppression of which has been generally considered as the sole cause of the disease. It has been said to be a hæmorrhagy vicarious of the menses.

The high importance of the uterine system in the animal economy cannot be doubted ; but the functions of this system are veiled in deep obscurity, and will not perhaps, be at any time clearly understood. They have occupied much of the attention of the speculative inquirer ; and ingenuity has been taxed, to invent theories in explanation of them, and of their influence, in health, and in disease.

The menstrual flux, the most obvious of the uterine phenomena, has afforded a wide field for discussion. It is interwoven with the opinions we entertain of almost every disease, to which the female sex is exposed. Its overflow, or its suppression, are the ready expounders of many symptoms; and the fruitful, though perhaps imaginary source of many diseases. This flux is a constant object of attention to females, who are, in general, well instructed, as to the importance and necessity of it.

These theories of the schools, and these early impressions on the female mind, give a consequence to this subject, and force it upon the notice of the medical practitioner, who must subscribe to the general opinions respecting the menses, and seem to adopt them, although he may question, in some respects, the foundation on which they rest, and the conclusions to which they lead.

Too curious a research into the arcana of nature is nugatory. These, doubtless for wise reasons, seem to be placed beyond the ken of mankind. When, therefore, we adopt the views and

language of the schools, on points merely theoretical, and deduce practical conclusions from them, it is probable we may err. I, for one, am inclined to think, that too much has been imputed to the influence of the menses, in circumstances of disease. In explaining these circumstances, we seem to have reasoned too much on a subject that is but too little understood.

Interruption of the menses. frequently takes place for a length of time, without prejudice to the health. Females often complain, about the usual period of menstruation ; and if the menses do not appear, the previous disease is hastily attributed to this circumstance, which, however, may be said, with greater reason, to have caused the suppression. If these things be so, we cannot but regret theoretical disquisitions, which have, in other instances, as well as in the present one, led us to an attempt of difficult accomplishment, and of uncertain issue, the restoration of suppressed menstruation ; while a different practice, more certain, and more useful, and founded on different views of the case, has been either never devised, or has been entirely neglected.

I feel myself at perfect liberty to make these reflections ; because, in the case now before us, the cause assumed, to account for vomiting of blood, proceeds upon limited, or mistaken information. Suspended menstruation is not a necessary concomitant of this hæmorrhagy, which appears when the menses are regular. I do not know in what proportion of instances this is the case ; but if it be so in one instance, this one instance overturns the theory, does away the vicarious nature of the ailment, and gives it a place, where I conceive it ought to have one, among idiopathic diseases.

About fifteen years ago, Dr Gasking, of Plymouth, passed a season in Edinburgh.—I had the pleasure to be acquainted with him, and I cultivated his friendship. At this time I had ascertained the efficacy of purgative medicines in several diseases : I conversed freely with Dr Gasking on these subjects, communicating the observations I had made.

Dr Gasking frequently walked the hospital with me. He observed a patient labouring under vomiting of blood, whom I had been treating

in the usual routine, with cooling acidulous medicines, and with different emenagogues, to no good purpose. He requested me to open her bowels with calomel ; he spoke with the decision which experience gives, and I followed his advice.

This patient was from the country ; of a robust make, and hale constitution. She was about twenty years of age. The alvine evacuation, procured on the exhibition of the purgative, was copious, and of unnatural appearance. She obtained immediate relief ; vomiting of blood did not return ; and a few more purgatives established her recovery. She left the hospital, strongly enjoined to preserve a regular state of her body, means for this purpose being furnished to her.

In three or four months, this patient returned, labouring under constipation, and vomiting of blood. The constipation was again removed, by means of calomel, and a great load of indurated and fetid feces was brought off. In a short time she left the hospital, again cured, and again admonished to be more attentive to the state of her bowels.

This instructive lesson was not lost upon me ; it taught me, that the vomiting of blood of which I speak, depends upon constipation of the belly, a circumstance which I had not before suspected.

I have followed the practice which this case suggested, in the instances of the disease which I have since met with; and my success has been so uniform, that I now lay it down as a certain position, that the proper exhibition of purgative medicines affords sure and effectual means of removing the vomiting of blood of which I speak.

The purgatives which I have used in these cases, have never excited vomiting; and what may be thought singular, I have never been able to ascertain the presence of blood in the feces.

As the strength of patients labouring under this vomiting of blood is generally pretty entire, we need not dread full purging ; but this effect is not wanted ; if we unload the bowels, we accomplish the cure.

The feces which are brought off are copious, unnatural in colour, consistence, and smell, as

they generally are after long remora, the consequence of obstinate and protracted constipation.

The different circumstances, which not only expose women to costiveness more readily than men, and when it does occur, to a more obstinate kind of it, as mentioned in the chapter on chlorosis, may explain, why they are exclusively the subjects of this disease:—A consideration, which affords me a strong additional argument, for inculcating the most sedulous attention to the careful support of a regularly acting state of the bowels: the only security against costiveness, that bane of health, and source of manifold distress.

In conducting the cure of vomiting of blood, I have not confined myself to the use of calomel alone; I have occasionally substituted other purgative medicines, as will be instructed by the cases inserted in the Appendix, page 103.

CHAP. IX.

OBSERVATIONS ON THE UTILITY AND ADMINISTRATION OF PURGATIVE MEDICINES IN CHOREA SANCTI VITI, OR ST VITUS'S DANCE.

SYSTEMATIC writers have paid little attention to chorea Sancti Viti; and practitioners have regarded it with indifference. These circumstances will surprise us the more, when we consider the formidable appearance of the disease, the obstinacy with which it holds its course, and the distressful state to which it always reduces, and the danger in which it sometimes involves, those whom it attacks.

Dr Sydenham described chorea Sancti Viti a hundred and twenty years ago, and his description, with little variation or addition, has been

copied by the few succeeding authors who have written on the subject.

Sydenham, in his “*Schedula Monitoria de novæ febris ingressu*,” gives the history of chorea Sancti Viti, in the following words :

“Chorea Sancti Viti convulsionis est species, quæ ut plurimum pueros puellasve à decimo ætatis anno, ad pubertatem usque invadit ; primò se prodit claudicatione quadam vel potiùs instabilitate alterutrius cruris, quod æger post se trahit fatuorum more ; postea in manu ejusdem lateris cernitur, quam, hoc morbo affectus, vel pectori, vel alii alicui parti adplicitam, nullo pacto potest continere in eodem situ vel horæ momento, sed in alium situm, aliumque locum convulsione quadam distorquebitur, quicquid æger contrà nitatur. Si vas aliquod potu repletum in manus porrigatur, antequam illud ad os possit adducere, mille gesticulationes, circulatorum instar, exhibebit ; cum enim poculum rectâ linæâ ori admoveere nequeat, deducta à spasmo manu, huc illuc aliquamdiu versat, donec tandem forte fortuna illud labris propius apponens, liquo-

rem derepente in os injicit, atque avidè haurit, tanquam misellus id tantum ageret, ut dedita opera, spectantibus risum moveret.”

This history, so far as it goes, is correct. It exhibits a faithful picture of the disease, of the various contortions and gesticulations of the patient. But it is silent on other circumstances, the affections of the natural and animal functions, which are essential to the disease, and which ought not to have been omitted. Besides, Sydenham details the symptoms of the advanced and confirmed state only, while he either has not perceived, or has altogether overlooked, the rise and progress of chorea. For these reasons, I give the following more extended narrative of the symptoms of chorea.

Chorea Sancti Viti attacks boys and girls indiscriminately; and those chiefly, who are of a weak constitution, or whose natural good health and vigour have been impaired by confinement, or by the use of scanty or improper nourishment. It appears most commonly, from the eighth to the fourteenth year. I saw it in two young wo-

men, who were from sixteen to eighteen years of age.

The approaches of chorea are slow. A variable, and often a ravenous appetite, loss of usual vivacity and playfulness, a swelling and hardness of the lower belly in most cases, in some a lank and soft belly, and, in general, a constipated state of the bowels, aggravated as the disease advances, and slight irregular involuntary motions of different muscles, particularly of those of the face, which are thought to be the effect of imitation, precede the more violent convulsive motions, which now attract the attention of the friends of the patient.

These convulsive motions vary. The muscles of the extremities, and of the face, those moving the lower jaw, the head, and the trunk of the body, are at different times, and in different instances affected by it. In this state, the patient does not walk steadily ; his gait resembles a jumping or starting ; he sometimes cannot walk, and seems palsied ; he cannot perform the common and necessary motions with the affected arms.

This convulsive motion is more or less violent, and is constant, except during sleep, when, in most instances, it ceases altogether. Although different muscles are sometimes successively convulsed, yet, in general, the muscles, affected in the early part of the disease, remain so during the course of it.

Articulation is now impeded, and is frequently completely suspended. Deglutition is also occasionally performed with difficulty. The eye loses its lustre and intelligence; the countenance is pale, and expressive of vacancy and languor. These circumstances give the patient a fatuous appearance. Indeed, there is every reason to believe, that, when the disease has subsisted for some time, fatuity, to a certain extent, interrupts the exercise of the mental faculties.

Fever, such as arises in marasmus, is not a necessary attendant on chorea; nevertheless, in the advanced periods of the disease, flaccidity and wasting of the muscular flesh take place, the consequence of constant irritation, of abating appetite, and impaired digestion, the common at-

tendants of protracted chorea ; and which, I doubt not, may, in some instances, although contrary to the opinion that chorea is not fatal, have been the forerunners of death.

From this history, chorea may be considered as consisting of two states or stages ; the incipient, and the confirmed. The incipient state takes place from the first derangement of health, till the full formation of the involuntary motions ; with these the confirmed state commences, and continues to the end of the disease.

After detailing the history, Sydenham proceeds, in the *Schedula Monitoria*, to deliver his theory and his conduct of the cure of chorea.

“ *Cùm affectus iste,*” (chorea scilicet,) “ *ab humore aliquo in nervos irruente, quorum irritatione istiusmodi motus præternaturales producuntur, pendere mihi videretur ; indicationes curativas primùm ad humores illos tam venæsectione, quàm purgatione minuendos, dein ad corroborandum genus nervosum omnino dirigendas censebam. Quem in finem hâc utor methodo. Sanguinem ex ægri brachio ad uncias septem,*

plus vel minus, pro ratione ætatis, educi jubeo. Die sequente vel dimidiam partem, vel quiddam ampliùs, (pro ratione vel ætatis, vel etiam majoris minorisve corporis, ad subeundam catharsin, aptitudine), potionis purgantis communis exhibeo.

“ Recipe—Tamarind. unciam dimidiam; fol. senn. drachmas duas; rhabarb. drachmam unam et dimidiam; coq. suf. quant. aq. ad uncias tres, in colat. dissolv. mann. et syr. rosar. solutiv. utriusque unciam.

“ Et vespere haustulum paregoricum propino.

“ Potionem istam cathartica ad tres vices alternis diebus repetendam prescribo, et haustum paregoricum iisdem noctibus. Postea sanguinem rursus extrahi curo, dein ut ad catharsin, uti priùs, æger revertatur. Atque ità, alternatim sanguinem mitto, et subduco alvum, donec ægro vena ter quaterve fuerit incisa, et post singulas venæsectiones toties fuerit purgatus, quoties vires ferre posse viderentur; eo tamen temporis spatio inter alternas evacuationes diligenter observato, ut nihil inde periculi ægro immi-

neat. Diebus à purgatione vacuis, sequentia prescribo.” *Hæc sunt medicamenta stimulantia, uti dicuntur, corroborantia, et alterantia quæ hic recensere inutile est.*

“ Quanto magis convalescit æger, tanto minus pedem ducit, tanto pariter et diutiùs, et constantiùs manum in eodem situ continet, et scyphum ori magis directà viâ admovet : quæ certissima sunt indicia quantum profecerit in sanitate reintegrandâ. Ad quam quidem consummatiùs perficiendam, licèt author non sim ut plus ter quaterve ut plurimùm sanguinem emittat æger, attamen remedia cathartica et alterantia eousque in usum sunt revocanda donec rectissimè tandem valeat.”

Sydenham mentions his success under this management: “ Quo morbo,” chorea scilicet, “ haud páuciores quinque laborantes et vidi, et sanavi ipsemet.”

Sydenham passes over in silence the time requisite for the cure of chorea. The intervals, however, between the three or four bleedings, during which purgative and pægoric medicines

were given, and the injunction to continue the use of cathartics and alteratives, after the last blood-letting, till the patient is at length completely recovered, make it probable, that many weeks, if not months, must have elapsed before the cure was effected.

The theory of the present day differs from that of Sydenham, which, although not very intelligible, may be as good as its substitute ; and the only useful part of his practice has been overlooked. Latter physicians, therefore, instead of elucidating the theory, and of improving the method of curing chorea, appear to me to have been retrograde in both respects.

It is now difficult to say, for what length of time the authority of Sydenham, and the credit which his opinions obtained, encouraged and protected the practice which he recommended. It is certain, however, that a doctrine and practice discordant with his have long prevailed. And it is probable, that the anxiety expressed by Sydenham, that, in the administration of blood-letting and purging, his patients should catch no harm ; together with the weakness, both of body

and mind, characteristic of the disease, may have introduced this change. Be this as it may, physicians are now inclined to refer chorea to a certain debility, or loss of tone, in which the convulsive involuntary motions originate. They of course neglect the "*humor aliquis in nervos irruens*;" they convert the caution of Sydenham into a total prohibition of blood-letting and purging; and in the cure of chorea they adopt the exclusive employment of stimulant and tonic medicines.

Under this practice, opium, camphor, sulphuric æther, valerian, cinchona, and different vegetable bitters, zinc, steel, ammoniacum, cupri, cold-bathing, and electricity, are the medicines which have been chiefly used. Most of these are casually mentioned in periodical publications, and are supported by that authority only which attaches to solitary facts. De Haen is an advocate for electricity. In his *Ratio Medendi* he gives several cases, in which it appears to have been exhibited with success. Medical electricity has, however, lost much of its early celebrity.

Notwithstanding the employment of these remedies, chorea has been found a tedious disease ; experienced practitioners having admitted that it has continued for many months, nay, for years ; terminating only, on some occasions, about the age of puberty.

This confession is not much in favour of the modern practice, or of the doctrine on which it rests. It is melancholy to reflect, that months, and years, the most valuable in respect of after life, should glide on, while an effectual check is given to the improvement of the mind, the cultivation of useful learning, or the acquisition of the necessary arts ; with the hazard of permanent fatuity, to a certain extent, or of a grotesque appearance, from the unconquerable remains of irregular motions being imposed on the young sufferers for life. To these certain consequences of protracted chorea, I will add, the danger which attends it ; I have no doubt, but that it must have, on some occasions, proved fatal.

In the course of my practice, I have seen above thirty cases of chorea : a greater number

than may have fallen to the lot of many to observe. I cannot say, with Sydenham, that I have succeeded in curing all of these. For several of my patients presented themselves while I yet employed tonic and stimulating medicines; when my practice shared the common fate, and met with disappointment. I am afraid I may even sometimes have done harm, by the indiscriminate use of the cold bath, a remedy not always suited to the exhausted and irritable state of the subjects of chorea.

I now began to desert a practice in which I had lost confidence, and to consider chorea in a different light from that in which it had been commonly viewed. I conceived that the debility and spasmodic motions, hitherto so much considered, might not be the leading symptoms of the disease, but might depend upon previous and increasing derangement of health, as indicated by irregular appetite, and constipation of the bowels.

Under this impression with regard to the erroneous opinions which I had heretofore entertained concerning the nature of the disease, and

the consequent improper practice which I had employed for the cure of it, I resolved to alter my mode of treatment, in order that I might fulfil those indications which the new, and, as I flattered myself, the more correct view of the disease had suggested.

If my conjectures were well founded, the first and principal object of practice would be to remove the constipated state of the bowels. In pursuance of this object, I began to try the effects of purgative medicines, given regularly in moderate doses.

At first, I confess, I acted with all that caution and diffidence, which the adoption of a line of practice, at variance with that which had been long approved and established, naturally inspires. But experience had convinced me of the safety of exhibiting purgative medicines in typhus fever; I therefore did not think any great risk would ensue from a cautious use of them in the most debilitated state, which chorea might induce. The conjecture proved to be well founded; the success of the practice confirmed the justness of the opinion on which it was formed,

and encouraged me to persevere with steadiness and decision.

The purgatives which I employed in the first instance, were of the weaker kind, and inadequate to the object to be obtained. Stronger ones were found to be necessary to move, and discharge the indurated and fetid feces.

I observed the quantity of feculent matter collected, to vary in different subjects, and at different periods of the ailment. I could not ascertain this by any previous circumstance. One would think, that the accumulation would be in proportion to the fulness and prominence of the abdomen ; but I do not find that this is the case. Perhaps the lengthened duration of the ailment, and the reduced state of the patient, the consequence of this, are attended with the greatest feculent accumulation. I think my observation bears me out in this conjecture, as in the instance of David Anderson, the history of whose case will be found at page 118 of the Appendix. This boy was emaciated and exceedingly puny, and his abdomen was lank ; yet, from the fifteenth day of December, when the commencement

of his recovery was observable, to the 25th day of the same month, the quantity of feces discharged was most wonderful, such as I had never seen before. It appeared to me, during the above period, to have nearly equalled in weight that of the whole body of the extenuated patient.

I have already noticed, that chorea consists of two stages. In the first, while the intestines yet retain their sensibility, and before the accumulation of feces is great, gentle purgatives, repeated as occasion may require, will readily effect a cure, or rather prevent the full formation of the disease.

In the confirmed stage, more sedulous attention is necessary. Powerful purgatives must be given in successive doses, in such manner that the latter doses may support the effect of the former, till the movement and expulsion of the accumulated matter are effected, when symptoms of returning health appear. Whoever undertakes the cure of chorea by purgative medicines, must be decided, and firm to his purpose. The confidence which he assumes is necessary to carry home, to the friends of the patient, conviction of

ultimate success. Their prejudices will otherwise throw insurmountable obstacles in the way. Half measures, in instances of this kind, will prove unsuccessful; and were it not for perseverance in unloading the alimentary canal, the disease would be prolonged, and would place the patient in danger, and thus bring into discredit a practice which promises certain safety.

Here, as in all other cases of extreme debility induced by disease, the recovery is at first slow and gradual. A regular appetite for food, a more intelligent eye, and lightened countenance, cheerfulness, and playfulness of temper, increasing aptitude for firmer motions, the restoration of articulation, and of the power of deglutition, a renovation of flesh and strength succeed each other, and being more and more confirmed, are, ere long, followed up by complete recovery.

For some time after these salutary changes take place, the state of the bowels must continue an object of attention. An occasional stimulus from purgatives will be requisite to support their regular action, and to restore their healthy tone, the

only security against the renewed accumulation of feces and of a consequent relapse.

About this time also, remedies possessed of tonic and stimulant powers, may be used with propriety and effect ; they restore energy to the torpid bowels, aid the purgative medicines in obviating costiveness, and thus confirm a recovery already advanced. Vegetable bitters, or the preparations of steel, may perhaps be the most useful for accomplishing these ends. I have not felt the necessity of having recourse to medicines of this kind: under a proper regimen of light and nourishing food, and of exercise in the open air, my patients, in general, quickly recover their strength. But many practitioners set a value upon tonic medicines ; and the usual routine of practice demands them.

By this treatment, which I have endeavoured to recommend, chorea is speedily cured, generally in ten days or a fortnight, from the commencement of the course of purgative medicines. I had lately two patients, Anne Ross, and Elizabeth Webster, under my care, whose cases proved obstinate ; four or five weeks elapsed, before I

could pronounce them in the way of recovery. The history of these cases is given at pages 124 and 134 of the Appendix. Some time ago I visited a boy, about twelve years of age, labouring under chorea, who was the object of my daily attention for five months. During this time, the amount of purgative medicines which were given, and the quantity of unnatural feces which were passed, would, I own, have appeared incredible to myself, had I not given the one, and had I not been an eye-witness of the other. By perseverance, I effected a complete cure of this protracted case.

In the structure of the female pelvis, and in the previous duration of chorea, we may find in part the reason why it admits of a more or less difficult cure. When the disease is protracted, or when it occurs in girls, greater opportunity for the accumulation of feculent matter is afforded, than in more recent cases, or than where it attacks boys. Of course, a longer time, and brisker purgatives, will be required to move, and expel the offending mass, in the former, than in the latter instances. This observation is aptly illustrated by the case of Elizabeth Webster, inserted at

page 134 of the Appendix. This girl, after a protracted chorea, was dismissed cured from the Royal Infirmary, on the eleventh of June 1805, but through neglect, the disease returned, and she again became a patient on the third of February 1806, Appendix, page 145; but the relapse having been recent, the cure at this time was completed in ten days. This rule, how just soever it may be in most instances, is not applicable to every case of chorea. Nelly Parker, Appendix, page 147, had laboured under chorea for two years; and yet was nearly cured by the use of purgative medicines in little more than two months. Other circumstances, therefore, besides those now mentioned, must be taken into consideration, when we attempt a prognosis in chorea; but what these are I have not learnt.

During the exhibition of purgative medicines in chorea, practitioners will learn the propriety and necessity of inspecting the alvine evacuations. They are, in this important point, generally careless; the attendants, in sick rooms, are of course ignorant on the subject, and cannot give the information necessary for ascertaining the ef-

fect of the medicines, the extent of the subsequent dose, or the frequency of its repetition.

I have said that chorea consists of two stages, a circumstance which should induce those who have the superintendence of children to attend most carefully, at all times, to the state of their bowels. For the timely interposition of purgative medicines will be the best means of averting the accession of chorea, which is so formidable, and which, on some occasions, has been found an obstinate, and, I doubt not, on others, a fatal ailment.

The caprice of children will often thwart us, and oblige us to employ purgatives, not because they are such as we would prefer, but because they are such as will be taken. I have in general used the purgative medicines in chorea, which I had found useful in marasmus. I have inserted, in the Appendix, page 113, the histories of some cases of chorea, which, while they illustrate the practice I have endeavoured to recommend, will, at the same time, shew the manner in which I have conducted it. I give also, in the Appendix, page 160, a letter from Dr James Home, Professor of Materna

Medica and Pharmacy in the University of Edinburgh, with a narrative of two cases of chorea, which he had treated by purgative medicines. And at page 163, I subjoin favourable reports of the practice from different correspondents.

This exhibition of purgative medicines in chorea, is I apprehend, countenanced by the practice of Sydenham, de Haen, and Dr Stoll of Vienna.

It is probable, that the purgative medicine was the only useful one which Sydenham employed; and that his protracted cures may be attributed to the interruption of the use of it, during the interposition of blood-letting, and of alterant and paregoric medicines.

De Haen, in the eighth chapter of his first volume of the *Ratio Medendi*, narrates a case, in the following words:—*Novem annorum puellam, cui post variolas morbillosque, primo tussis frequens, deinde sputum purulentum aderat, sputum demum plane cessabat, chorea Sancti Viti prehendit, sinistro potissimum brachio pedeque,*

ac diversimoda faciei convulsio. Bimestri spatio, adhibita vi electrica, pustulæ copiosæ, eæque turpiter crustosæ, brachium et crus cingunt, *interpolatis purgantibus*, perfecta salus redivit."

Maximillian Stoll, supposed to have been the successor of De Haen, gives, in a clinical work, not much known in this country, two cases of chorea which he treated successfully. I transcribe these as translated by Dr Kellie, from a paper in the second volume of the Edinburgh Medical and Surgical Journal, page 423.

"A young man of sixteen was, on the 23d May 1779, affected with sickness and giddiness of the head, being in other respects well enough. On the following days, the head was still more affected, and he complained besides of heat, and a sense of oppression about the præcordia, distention of the hypochondria, subacid eructations, nausea, retching, feverishness, a kind of rheumatic pain, with a sense of prickling of the left arm, immediately followed by startings and momentary convulsions of that extremity. His nights were disturbed.

“ 26th May.—The gesticulations and motions of the left arm more and more irregular, and less obedient to the will. The other symptoms as before.

“ 27th.—Became irascible. The left leg also affected, and its motions irregular. The other symptoms worse.

“ 28th.—The tongue covered with small pustules. The mouth drawn somewhat to the left side.

“ 30th.—A few pustules have also appeared on the face. All the former symptoms aggravated. He was blooded both on this and the following days, without experiencing any relief. Nights very restless.

“ With these symptoms, he was received into the hospital, on the first of June. The tongue was white ; and the belly was, as it had been all along, very costive. Some opening saline medicines being premised, he had an emetic—what he vomited was bitter. The fever and uneasi-

ness of the præcordia disappeared, and the limbs became steadier. Purgative medicines were afterwards given ; and thus, by the 7th of June, he was so far cured, that he complained of nothing but the rheumatic pain of the left shoulder and arm. A blister was applied between the shoulders, and a diaphoretic draught was administered. But on the following day, without any obvious cause, he began to weep, and talk very foolishly, and every limb, the trunk of the body, the head even, and the muscles of the face, were affected with inordinate gesticulations. The disease advanced under the use of the fetid gums, and became still worse after the administration of camphor. Now, the mouth was clammy and foul, and the teeth covered with sordes.

“ At length the symptoms were relieved by saline laxatives, but the disease was not cured.

“ The extract of belladonna was tried, but occasioning vertigo, headach, and delirium, it was omitted, and then it was thought best to purge the bowels with rhubarb, neutral salts, and the oxymel of squills. He passed slime, and one

lumbricus; and he said that he had formerly discharged others. The belly was moderately but daily purged; and thus his tongue became clean, his limbs strong, and the other symptoms disappeared, so that, by the end of the month, he returned home cured.

“ Another case of chorea Sancti Viti I have treated in the same way. The patient was a girl subject to rheumatism, which being neglected, terminated spontaneously in chorea. She was cured by solvents, eccoprotics, rhubarb, arcanum duplicatum (sulphat of potass), and oxymel scillicum. Stimulants, belladonna, the flowers of zinc, and electricity, have appeared hurtful in that species of chorea which arises from pituita and worms of the intestinal canal.”—*M. Stoll, Ration. Medendi, pars 3tia, page 219, observat. VII. and VIII. Edit. Paris, 1787.*

Dr Kellie concludes with the following remarks :

“ No examples can be more decisive than these cases, and none surely could more happily illustrate the pathology and treatment of chorea

recommended by Dr Hamilton. For first, we remark, as precursors of the disease, symptoms of disordered and loaded bowels, heat or oppression of the præcordia, acid eructations, nausea and vomiting, and costiveness ; next, the inefficacy of antispasmodic and stimulant remedies ; then relief from laxatives, and disorder from narcotics ; and lastly, the speedy completion of the cure, on the administration of medicines evacuating the bowels moderately, but daily."

CHAP X.

OBSERVATIONS ON THE UTILITY AND ADMINISTRATION OF PURGATIVE MEDICINES IN HYSTERIA.

THE symptoms of hysteria are numerous, and being differently modified in different instances, they give a variety to the disease which is embarrassing to young practitioners.

The most common symptoms of hysteria, and those which are esteemed to be pathognomonic, are acute pain in the forehead, or over either orbit, which is confined to a small spot ; shifting pains of the abdomen, flatulence, constipation of the body ; sometimes, though rarely, vomiting and purging ; acid and fetid eructations ; an irritable, and occasionally a despondent state of

mind ; unquiet sleep, which is frequently disturbed by incubus and frightful dreams.

These symptoms produce the chronic state of hysteria, and predispose to the excitement of the more violent hysteric affections, fits or convulsions. These fits sometimes attack suddenly, but are more frequently preceded by other symptoms, which give warning of their approach ; such as a sense of oppression over the chest, palpitation of the heart, a dry cough, a copious flow of pale-coloured urine ; and above all, by the sensation, as if a ball, formed in the lower part of the belly, traversed the abdomen, ascended by the left side, and reached the stomach, and from it the œsophagus and larynx, producing difficult deglutition and sense of suffocation.

After this the patient falls down, and is violently agitated, with convulsions of different muscles, particularly of those of the abdomen, which is thereby greatly contracted and drawn inwards. This convulsive motion continues for some time, when sleep supervenes. From this

sleep, the patient awakes sobbing and sighing, and with a murmuring noise throughout the abdomen; and most commonly without any recollection of what has passed during the fit. This fit is frequently renewed for a length of time, in the same person, who enjoys tolerable health during the intervals.

Hysteria is more frequent and more severe in women than in men. Hence it has been thought, although erroneously, to be peculiar to females.

The period when it prevails most, is from puberty to the age of thirty-five. Women of a plethoric habit, or of what is called the sanguine temperament, are most commonly exposed to it; and in them it often accompanies the regular flow of the catamenia.

Different slight causes readily induce hysteric paroxysms, in persons predisposed to them, such as fatigue, great and sudden evacuations, peculiar odours, and certain objects, which, either from a constitutional or acquired aversion, occasion unpleasant or uneasy sensations. Men-

tal agitations also, from surprise, grief, joy, and other passions, are common exciting causes of hysteria. Here too, the medical moralist again appears ; but I believe his insinuations, equally groundless and indelicate, exist only in his own prurient imagination.

I have felt the necessity of premising this short history of a disease, which it is indeed difficult to describe, because I shall refer to it in the subsequent part of this chapter.

Frequent disappointments in curing hysteria led me to take a full, and I hope an impartial review of the subject. This review has inclined me to doubt the solidity of the opinions which have been entertained respecting hysteria, and the soundness of that uniform practice, which has been so long followed in the treatment of it.

Hysteria, as this name implies, has been conceived to proceed from affections of the uterus. Accordingly, suffocation of the womb, and effluvia from corrupted semen and depraved menstrual blood, are, by the suffrage of the ancient,

and even of some of the more modern physicians, accounted to be its immediate cause. This doctrine, however, is now so little regarded, that it is unnecessary to adduce arguments in refutation of it.

Our countryman, Sydenham, who reasoned more than he seems to have been aware of, and often in a manner not very intelligible, in *dissertatione epistolari ad Gulielmum Cole*, third edition, page 362, speaks thus of hysteria. “Pendent ergo, affectiones istæ, quas in feminis hystericas, in maribus hypochondriacas insignire libet, quantum ego judico, a spirituum animalium *αταξία* unde facto impetu in hanc illamve partem plus quam pro rata densi nimique feruntur, spasmos uti et dolorem excitantes ubi in partes sensu exquisito præditas irruunt, atque organorum, tum ejus in quod se ingerunt, tum istius a quo abscedunt, functiones pervertentes; cum utrumque ab hac tam iniqua partitione, quæ naturæ œconomix penitus adversatur, haud parum detrimenti capiat.”

“Hic jam spiritus, facto quasi agmine in ventre inferiore, catervatim, magnoque impetu

in fauces irruentes, spasmos excitant per omnem quam transeunt regionem, ventrem inflantes ad instar globi præ grandis, qui tamen nihil aliud est quam partium spasmo tentatarum convolutio et quasi conglobatio quædam, quæ non nisi magna vi reprimi potest et coerceri." Page 363.

" Satis itaque jam constat opinor, omnem hunc morbum ad spiritus animales non rite dispositos referri debere ; nec a semine aut sanguine menstruo corruptis, quod asserunt nonnulli auctores, et halitus malignos in partes affectas elevantibus, produci ; nec a suecorum nescio qua perversa depravatione, sive etiam humorum acrimoniae congestionem, ut alii volunt ; sed ab iis quas modo assignavimus causis." Page 368.

To quote these passages, setting forth Sydenham's doctrine on this subject, is, I apprehend, *pace tanti viri*, to refute it. For indeed it is not easy to comprehend what Sydenham understands by the animal spirits ; or in what manner they are impelled by rapid motion from one place or organ into another, so as to produce precisely the hysterical convulsion.

When the nervous pathology attracted the notice and admiration of the public, another opinion was formed of this disease.

Dr Cullen, in his *First Lines of the Practice of Physic*, paragraphs MDXX, MDXXI, MDXXII, MDXXIII, says—"Having thus endeavoured to distinguish hysteria from every other disease, I shall now attempt its peculiar pathology. With respect to this, I think it will, in the first place, be obvious, that its paroxysms begin by a convulsive and spasmodic affection of the alimentary canal, which is afterwards communicated to the brain, and to a great part of the nervous system. Although the disease appears to begin in the alimentary canal, yet the connexion which the paroxysms so often have with the menstrual flux, and with the diseases that depend on the state of the genitals, shows, that the physicians have at all times judged rightly in considering this disease as an affection of the uterus and other parts of the genital system.

"With regard to this, however, I can go no farther. In what manner the uterus, and in par-

ticular the ovaria are affected in this disease; how the affection of these is communicated, with particular circumstances, to the alimentary canal; or how the affection of this, rising upwards, affects the brain, so as to occasion the particular convulsions which occur in this disease, I cannot pretend to explain.

“ But although I cannot trace this disease to its first causes, or explain the whole of the phenomena, I hope that, with respect to the general nature of the disease, I may form some general conclusions, which may serve to direct our conduct in the cure of it.

“ Thus, from a consideration of the predisponent and occasional causes, it will, I think, appear, that the chief part of the proximate cause is a mobility of the system, depending generally upon its plethoric state.

“ Whether this disease ever arises from a mobility of the system, independent of any plethoric state of it, I cannot positively determine; but in many cases, that have subsisted for some time, it is evident that a sensibility, and conse-

quently a mobility, are acquired, which often appear, when neither a general plethora can be supposed to subsist, nor an occasional turgescence to have happened. However, as we have shown above, that a distention of the vessels of the brain seems to occasion epilepsy, and that a turgescence of the blood in the vessels of the lungs seems to produce asthma; so analogy leads me to suppose, that a turgescence of blood in the uterus, or in other parts of the genital system, may occasion the spasmodic or convulsive motions which appear in hysteria. It will, at the same time, be evident, that this affection of the genitals must especially occur in plethoric habits; and every circumstance mentioned in the history of the disease, serves to confirm this opinion, with respect to its proximate cause."

It is not without hesitation, that I oppose any opinions which Dr Cullen has promulgated and supported. But my observations respecting the influence of the uterine or genital system in vomiting of blood and chlorosis, and my conclusion from thence, that this influence, if it does exist, is not of that magnitude which is commonly supposed; militate equally against the opinion that hysteria

originates in this influence. I cannot therefore, but consider Dr Cullen's theory as resting more upon supposition, and a consequent train of reasoning, than upon facts and experience; and as meriting less attention now than it has commanded for many years.

There is a coincidence and similarity between the doctrine of Sydenham and that of Dr Cullen, on the subject of hysteria. At least the *αταξία* or irregular motions of the animal spirits, proposed by the former, appear to convey the same idea, as the sensibility and mobility of the system of the latter. Setting aside, therefore, the antiquated notion of the suffocation of the womb, we may be said to have only one theory of this disease; a theory which has engrossed the attention of the speculative physician, and which has directed the conduct of the practitioner for upwards of a century.

But, although this coincidence may not be perceived or admitted by others; yet whatever difference, whether apparent or real, may exist between the opinions of Sydenham and Dr Cullen, the practice of both, with some slight varia-

tions, is nearly the same. Fetid and antispasmodic medicines, are employed to alleviate the violence and shorten the duration of particular fits; blood-letting is not excluded from the practice of either in hysteria, but Sydenham is disposed to employ it more freely than Dr Cullen. I do not perceive that Dr Cullen anywhere mentions purgative medicines as proper in hysteria; Sydenham gives them previous to the exhibition of other medicines, for three or four following mornings, page 371. Dr Cullen proposes to remove plethora, by blood-letting, a spare diet, and regular exercise; while, at the same time, he cautions us, that increased mobility may, on some occasions, proceed from inanition, when a fuller supply of nourishment, and tonic medicines are indicated, as in epilepsy, paragraphs MCCCXXV, and following ones.

For the rest, both these learned and justly celebrated men, treat hysteria with astringent, stimulant, and tonic medicines; in the view of restraining and regulating the irregular motion of the animal spirits, or of obviating the too great sensibility and mobility of the system. The cure

of hysteria, by this management, is often difficult, and generally tedious.

Physicians have had correct views with regard to the history and appearance of hysteria. But the peculiarity and violence of the fits seem to have attracted all their thoughts, and prevented them from bestowing the necessary attention on other circumstances of the disease. For this reason, I premised a history of hysteria, which does not differ from other histories, except in the arrangement of the symptoms, by which, those which precede the fit, those which accompany the fit, and those which immediately follow it, are clearly ascertained and distinguished.

Among the symptoms which mark the hysteric constitution, shifting pains of the abdomen, flatulence, constipation at one time, at another, vomiting and purging, together with acid and fetid eructations, are conspicuous.

The sensation of a ball wandering through the abdomen, and ascending to the stomach, and from thence through the œsophagus to the pharynx, is a prominent symptom among those

which immediately precede, and give warning of the approach of the fit.

Convulsive motions of the muscles of the abdomen, which is thereby greatly contracted and drawn inwards, accompany the paroxysm; upon the cessation of which, a murmuring noise throughout the abdomen is frequently heard.

These symptoms undoubtedly denote a preternatural affection of the stomach and alimentary canal. In my opinion, they afford conclusive evidence, that this affection is primary, and that the other multifarious symptoms of hysteria depend upon it. I have, therefore, thought it reasonable to attend particularly to the state of the stomach and intestines, and to employ, in the first place, purgative medicines, to remove the constipation of the body, which most commonly prevails in hysteria. I have seldom seen vomiting and purging in cases of pure hysteria; but the presence of these symptoms would not deter me from exhibiting purgatives, as their efficacy in removing these symptoms in other circumstances of disease is well known. I was the more disposed to adopt this practice in hysteria,

from my experience of its general safety and peculiar utility in other diseases, that are commonly supposed to be of a nervous nature.

I have not been disappointed in my expectations in thus treating hysteria ; my success has been equal to my wishes, and the source of much satisfaction to me. Yet my experience is not so complete as to enable me to say to what extent purgatives may be employed in hysteria, exclusively of other medicines. Within certain limits, accordingly call in the aid of fetid and tonic medicines ; but, in my estimation, they are merely subsidiary, and, on some occasions, may be altogether overlooked, as they were in the treatment of Isabel Black and Sarah Macmillan, whose cases are inserted in the Appendix, pages 168 and 170. In particular instances, where great anxiety prevails, recourse may be had to wine in moderate quantity, till such time as relief is obtained by purgatives.

I may add, by way of caution, that in hysteria, as well as in chlorosis, vomiting of blood, and chorea, the full exhibition of active purgatives is necessary to procure even moderate evacua-

tions from the bowels; and that this exhibition must be continued from day to day, until such time as the feces are natural, or until the disease ceases:

The first purgatives that we use, may seem, on some occasions, to aggravate the symptoms; but the practice must not be deserted on this account. The additional irritation which purgatives may give in the first instance, soon passes away; and the perseverance in the use of them removes that irritation which gave rise to the disease, which, of course, disappears in proportion as the bowels are relieved of the oppressive mass of accumulated feces.

There are instances of counterfeited hysteria, when persons of a perverse turn of mind, or who wish to excite compassion, or solicit charity, often imitate the paroxysm of hysteria so exactly, as to deceive common observers. It is plain, that any remedy used in these cases must fail, so long as the impostor finds it convenient to carry on the deception. The practitioner who proposes to adopt the use of purgative medicines in hysteria, ought previously to satisfy himself that the dis-

case really exists ; otherwise the failure of promoting a cure, as in feigned cases he must fail, will bring discredit on the practice, which, having found useful, I have endeavoured to recommend.

I have subjoined, in the Appendix, page 165, cases of hysteria which I have treated by purgatives;—to these I refer the reader, who will, in them, find a detail of my practice, and of my general mode of conducting it. The reader will find, also, in the Appendix, page 174, a letter from Mr Law, one of the surgeons of the Royal Infirmary, and surgeon to the Bridewell of Edinburgh, addressed to me, in which he gives an account of a case of hysteria, which he treated successfully by purgative medicines.

CHAP. XI.

ON THE UTILITY OF PURGATIVE MEDICINES IN TETANUS.

TETANUS literally means a tension ; and, in a medical sense, implies a spasm of the muscular fibres. It affects most commonly the muscles which are subservient to voluntary motion. Tetanus has been described by many writers, from the time of Hippocrates downwards. But notwithstanding the attention which this singular disease has attracted, no certain means have yet been discovered of relieving the misery which it occasions, or of obviating its fatal tendency.

Tetanus often approaches in a gradual manner ; the first symptoms of the disease appearing, on many occasions, at a period more or less

remote from the exposure to the causes which induce it.

On the attack, the patient usually complains of an uneasy sensation and small tenseness about the præcordia; which is followed by stiffness of the hind neck and about the shoulders, and lassitude, which make the attempt to move the head difficult and troublesome. The jaws become stiff, and cannot be opened without pain. The patient about this time, feels a sudden and painful traction about the cartilago ensiformis, which tends towards the spine, with an aggravation of the above symptoms, and a drawing of the head backwards.

Thus circumstanced, the patient refuses nourishment, as deglutition is painful, and excites a return of the spasms. The lower extremities are enfeebled, and incapable of affording their usual support; the pulse is slow and very hard, and the body is constipated.

The traction or spasm under the cartilago ensiformis, or the pain, as it appears to be, of the

epigastrium, which is accounted the pathognomonic symptom of tetanus, becomes now more violent, and returns every ten or fifteen minutes, and is instantly succeeded by a stronger retraction of the head, and greater rigidity and pain around the neck, which, extending in the course of the spine to the lower extremities, these are instantly put to the stretch. The jaws are at this moment locked together, and cannot afterwards be opened so wide as to receive the end of the little finger. The attempt to force them open, hurries on the general spasm.

The muscles concerned in deglutition, and the pectoral and deltoid muscles, are most violently contracted. The shoulders are pushed forward; the arms are stretched out, or are drawn across the body; but the muscles moving the wrists and fingers are not affected with spasm. The cheeks are often drawn towards the ears, and the teeth are exposed as in the *spasmus cynicus*.

This paroxysm ceases in a few minutes, and leaves the patient in a comparatively relaxed and easy state. He breathes quick for some minutes, as if he had been excessively exercised.

The face is sometimes pale during the intervals of the spasm, but is oftener flushed, and is expressive of the most melancholy distress. Fluid passes with difficulty into the stomach; the attempt to swallow frequently induces the spasm, when the fluid is returned with some force through the nose.

Blood drawn at this time appears to be of a dissolved texture; the pulse varies in respect of quickness, fulness, and hardness; the tongue is not loaded; the urine is high-coloured; and the body continues so constipated, that the alvine evacuation is procured with difficulty.

The disease is now advanced, and reduces the patient to the most distressful and calamitous state. He is as it were in a continual rack of torture, the spasm, hardly suspended for the space of a minute, being more severe on each attack, and of longer duration. The contraction of the muscles is more general; and according as one set of muscles is more strongly contracted than their antagonists, the body is forced into different and highly painful postures. The belly feels to be hard; it is flat and drawn inwards.

The abdominal muscles do not yield on pressure, and do not seem to favour the descent of the diaphragm, in inspiration. The body is often projected with violence in different directions, and the patient is only secured from injury by the care of the attendants. *Genituræ jactura inopinata, sæpe sequitur tentiginem invitam.* The tongue is frequently darted out of the mouth, and miserably torn between the teeth.

The countenance is much contracted; copious sweat flows; the pulse becomes quick and irregular; respiration is variable, sometimes it is hurried and laborious, and again it is less so, and natural. Articulation is indistinct; the sound of the voice is changed, it is grating and horrible to the ears. The heart throbs violently, and a palpitating motion is felt over the epigastric region. The eyes are watery and languid; the jaws are so fast locked, that drink or nourishment, even if they could be swallowed, cannot be introduced.

During this distressful progress, the comfort of sleep, as may well be imagined, is denied to

the sufferer ; what he may enjoy is short, interrupted, and unrefreshing.

In this state, delirium and a mortal anxiety ensue. A continued and severe spasm often finishes the tragedy ; but oftener a general convulsion brings life to a period. The patients, for the most part, are completely relaxed and sensible just before death.

Tetanus is a rapid disease ; its fatal termination generally takes place on the fourth or fifth day from the first attack. In some rare instances, when the disease is protracted for a few days more, a patient will accidentally survive, and with care and attention make a slow recovery ; and, in the course of some months, feel himself restored to a certain share of comfort and happiness.

Tetanus is a disease of every country, but it is much more frequent in warm than in temperate climates ; and in the warmer than in the cooler seasons of the year. People of all ages, and of both sexes, are obnoxious to tetanus ; but it is

said to be more prevalent in those of middle age, than in the old and the young ; in males than in females ; and in robust and vigorous people, than in the weak and the infirm.

Tetanus is known under different appellations, according as particular muscles are affected ; or according as one set of muscles, under a stronger spasm than their antagonists, give a particular curvature or posture to the body. Thus trismus, emprostotonos, and opisthotonos, denominate varieties, which are now recognised as constituting the generic disease, tetanus.

I have taken this account of tetanus from the histories which have been given of it, by Dr Hillary, in his observations on the epidemic diseases in the Island of Barbadoes, London, 1766 ; and by Dr Lionel Chalmers, in a communication printed in the first volume of the London Medical Observations and Enquiries.

Authors mention a great many occasional causes of tetanus ; passions of the mind ; interrupted menstruation ; too copious evacuations, particularly such as happen in cholera morbus ;

retrocedent gout and exanthemata; putrid fevers; and worms. Hysteria, hypochondriasis, and chorea, have also, in the excess of their spasmodic affection, on some occasions, emulated the milder symptoms of tetanus, while at the same time they have retained their own generic character. In the Appendix, page 118, the case of David Anderson, and that of Ann Ross, page 124, exhibit proofs of tetanic affection in chorea.

Tetanus, induced by the above-mentioned causes, must be considered as a symptomatic disease; and the cure must be conducted according to the indications which apply to the particular case.

Idiopathic tetanus is said to be owing, in the first place, to exposure to the vicissitudes of the atmosphere, as varying from hot to cold, and from dry to moist, when the body has been, at the same time, overheated by exercise, or by the warmth of the climate or season.

In the second place, wounds of the soft parts, whether severe or slight, are mentioned as occa-

sional causes of tetanus, which sometimes supervenes soon after the accident, but oftener at a distant period.

Thirdly, tetanus arises in children, from the retention of the meconium, or from the presence of other matters conveyed too early into the stomach, under the form of nourishment ; in this case it is known by the name of *trismus nascentium*.

I have remarked that, in some of the diseases of which I have treated, physicians, disregarding their general history, have confined their attention too much to the consideration of a single symptom ; and have thereby committed mistakes both in theory and practice. In my apprehension, tetanus affords another instance of the bad effects which arise from a limited, or perhaps erroneous view of a disease.

From the days of Hippocrates to the present time, the agonizing spasms, the prominent symptom of tetanus, have arrested the notice of every one. To resolve the spasm, and to cure the disease, seem to have been conceived to be one and

the same thing. Accordingly, opium, musk, warm-bathing, cold-bathing, and mercury, the most powerful of the antispasmodic remedies, have been chiefly employed in tetanus. They have been recommended by the earlier writers ; and their praises have been re-echoed by succeeding practitioners. But what claim have these medicines to be extolled ? have they mitigated the severity of tetanus, or obviated its fatal tendency ? The records of physic bear a sad testimony in the negative.

It is unnecessary to enter upon a minute detail of the specious practice by antispasmodics in tetanus ; such a detail might, indeed, afford an opportunity of shewing that some of them may be productive of mischievous effects. Dr Hillary has observed, that instantaneous death has followed warm-bathing in tetanus. And I greatly suspect, that the after consequence of the high and frequently-repeated doses of opium, which many authors recommend, and which neither alleviate pain nor induce sleep, must be injurious. But such discussions as these might be thought to be invidious, while they would lead to no useful inference.

However just the foregoing observations may be, I should yet have been sorry to have advanced any thing to shake the tottering fabric of medical practice in tetanus, unless I thought it had been in my power to substitute one more efficacious, originating in other views of the disease. These views I apprehend will warrant the expectation of considerable benefit from the full and free exhibition of purgative medicines ; and they are supported by the following considerations :

In the first place, it appears from the history of tetanus, that it often approaches in a gradual manner ; hence it is probable, that the attack is generally preceded by symptoms of bad health, although these may not be always observed. We also learn from the history, that an uneasy sensation or tenseness about the præcordia is among the first symptoms, and is at the same time a permanent one of tetanus ; and that as this is aggravated, all the other spasms are increased in the frequency and severity of their attack. The history farther shews that the body is obstinately constipated throughout the whole of the disease.

These circumstances, which present themselves with great uniformity, make it exceedingly probable, that the functions of the stomach and intestines are materially deranged, previous to the attack, and during the prevalence of tetanus ; and point out the propriety of using purgative medicines in the treatment of it.

In the second place, the influence of exposure to long-continued heat on the biliary system is ascertained ; and it is well known that the diseases thence arising, such as bilious or yellow fever, cholera, and dysentery, are accompanied with great stomachic distress, as marked by sickness, vomiting, and thirst. It is probable, therefore, that tetanus, appearing under similar circumstances of exposure to heat, must also be accompanied with derangement of the biliary system, and of the stomach and intestines, which will excite a predisposition to the disease, and require the interposition of purgative medicines.

In the third place, I have proved that chorea and hysteria, both of them convulsive or spasmodic diseases, are accompanied with disorders

of the stomach and bowels, and with costiveness; and that these diseases have, in a great number of instances, been relieved, if not cured, by a due perseverance in the use of purgatives. I infer, therefore, that tetanus, a spasmodic disease, and accompanied with costiveness, may also be relieved, if not cured, by a proper administration of the same remedies.

In the fourth place, I may adduce, from the practice of others, presumptive evidence of the utility of purgative medicines in tetanus. These medicines have not been altogether excluded from medical practice in this disease; but they have been exhibited with a secondary view only; while little or no attention has been paid to their effect on the bowels; for in some instances they appear to have been useful, without this effect having been so much as suspected or acknowledged.

Dr Wright revived the practice of cold-bathing in tetanus, about forty years ago. In the sixth volume of the London Medical Observations and Inquiries, he gives an account of six cases suc-

cessfully treated, in Jamaica, by the affusion of cold water. In the two first patients, a natural stool was voided soon after the affusion of the water; a frequent consequence of similar applications to the surface of the body. The third patient had a cooling purge before the cold water was used; and attention had been paid to the state of the belly of the fourth patient, previous to the affusion of the water. No notice is taken of the state of the bowels of the fifth and sixth patients. Thus, it is probable, that the salutary termination of four of these cases, adduced in proof of the utility of cold-bathing in tetanus, was in a great measure owing to the open state of the body.

Dr Thomas Cochrane practised medicine in the Island of Nevis upwards of thirty years ago. A communication from him, "On the use of cold-bathing in the cure of tetanus," is printed in the third volume of the Edinburgh Medical and Philosophical Commentaries. The narrative bears, that the subject of the experiment opened his jaws pretty freely, and walked tolerably upright, in a few days from the affusion of the cold

water. It also bears, that on the first attack, a dose of castor oil procured several stools; and that glysters and gentle laxatives were frequently given. I am therefore led to a conclusion, which did not occur to Dr Cochrane, that the cure effected in this case was owing, in a great measure, to the preservation of the open state of the body throughout the course of the disease.

Dr Monro gives a communication, which is printed in the third volume of the *Edinburgh Literary Essays and Observations*, in illustration “of the usefulness of mercury in convulsive disorders.” The case to which the Doctor’s observations refer is of tetanus, supposed to have proceeded from a wound. The mercury was not used till three weeks after the attack of the spasm, when, from its protracted state, as appears from the history of tetanus, the disease may have been supposed to have yielded, and the patient to have been in the way of recovery. The spasms remitted in about thirty-six hours from the first application of the mercurial ointment, and before it could have made any material impression on the habit. In the meanwhile, several purgatives

were given early in the disease, occasional glysters were thrown up during its course, and laxative ptisans were exhibited in its decline. To these, therefore, while the effects of the mercury were hardly to be perceived, I am inclined to assign the salutary protraction, and the happy termination of the disease.

In the fifth place, the utility of purgatives in the treatment of tetanus, appears to be established by the direct and useful employment of them in the disease. Dr Hillary, in the work quoted above, page 242, and Dr Lionel Chalmers, in the *Medical Observations and Inquiries*, London 1771, page 109, have shewn, that in *trismus nascentium*, purgative medicines, if exhibited early, dislodge a quantity of unnatural matter that seems to have been collected in the stomach and intestines, and arrest the formation and progress of the disease, which, previous to the adoption of this practice, had, like tetanus in other instances, proved too generally fatal.

Lastly, I adduce proofs, from my own practice, of the good effects of purgative medicines, in what

appeared to me to have been instances of incipient tetanus ; these proofs, transcribed from the records of the Royal Infirmary, are inserted in the Appendix, page 177. The communication from Mr John Burns, surgeon in Glasgow, Appendix, page 190, strengthens the opinion I had formed of the utility of purgative medicines in tetanus.

It will not be easy to account, upon the principle of derangement of the stomach and intestines inducing tetanus, for its appearing as the consequence of wounds. But, without engaging in any argument on this subject, I will observe, that when the attack of tetanus is long posterior to the accident, it is probable that derangement of the stomach, also subsequent to the accident, may be the cause of the disease ; and that when tetanus follows the injury immediately, and when excision, scarification, and cauterizing of the wounded part have failed of procuring relief, and they almost always fail, I would in both instances resort to the use of purgatives, rather than to that of antispasmodic medicines, which have so often disappointed our hopes. If I am not mistaken, in the view which I have taken of the communi-

cation from Dr Monro, it affords an instance of the utility of purgatives in tetanus from wounds.

Such are the facts, and such the reasoning, on which I rest the probable utility of purgative medicines in tetanus. Every one will judge of, and appreciate them for himself. It would have been more agreeable to me, however, to have withheld my sentiments on this subject, till such time as I had brought them to the test of experience. But living in the 55th degree of northern latitude, and advancing in years, I have no prospect of meeting with proper opportunities of doing so. And although these speculations may not be confirmed by the experience of others; yet I trust they will at least display a sincere desire, on my part, to promote and extend the usefulness of practical medicine.

In concluding my observations on spasmodic diseases, I beg to subjoin an extract from Camper's *Anatomico-Pathological Demonstrations*, which has been lately pointed out to me. I submit it without comment to the reader's consideration.

“ Nervis descriptis ad symptomata accedo, quæ ex eorum unionibus facile explanantur; ordiatur autem a *pedum tremore, qui hystericis familiaris est*. In antecessum verò monere debeo, omnia terribilia hystERICA symptomata, quæ tum in singulis, tum in universi corporis locis quotidie videmus, ab acrimonia putrida primas vias occupante omnino dependere; excrementorum enim foetor intolerabilis, faucibus, et alia quæ præter naturam sunt, rigorum et convulsionum accessum annuntiant. Res igitur ita se habere videtur; plexu mesenterico inferiori affecto, nervi omnes cum eo conjuncti, lumbales scilicet, et proinde crurales atque obturatores nervi afficiuntur. Si acrimonia tanta est ut etiam rectum intestinum irritare queat, nervi Ischadici in consensum trahentur, rigebitque pes integer, concutietur, et per vices quiescet, donec animi deliquium tumultum sedet.

“ Infantum inferiorum extremorum convulsioncs, ex ascaridibus rectum intestinum occupantibus, hanc theoriam confirmant.

“ *Purgantia, etiam drastica licet imprudenter adhibita, propterea forsàn, epilepsias spurias, cho-*

ream Sancti Viti, aliosque spasmodicos sanarunt morbos, qui desperati a medicis habebantur."

Petri Camperi, Demonstrationum Anatomico Pathologicarum, liber secundus, p. 8. Amstelædami, 1762.

CHAP. XII.

CONCLUSION.

THE inductive reasoning employed in this chapter, and the histories of anomalous diseases contained in the tenth number of the Appendix, are intended to shew the extensive utility of the practice by purgative medicines, and to incite to a farther investigation of the subject, which I conceive to be far from being exhausted. But as I have proposed to give the result of my own experience only, it would not become me to insist, how guardedly soever, on the seeming tendency of speculative disquisitions, which I merely open, and which I leave to be prosecuted by others, when the number of well authenticated facts will render it safer than at present to generalize.

From the facts detailed in the foregoing pages, I am enabled to infer, that purgative medicines may be employed with more freedom, and with greater benefit than has been commonly imagined. The practice which leads to this conclusion is presented in a simple form. It is neither disguised by hypothesis, nor obscured by the simultaneous employment of various remedies. At the same time, it is supported by proofs of unquestionable authenticity, which, in point of appositeness and accuracy, are not surpassed by any in the records of medicine. On these accounts the truth or fallacy of my opinions may be easily investigated, and an adequate judgment of them readily formed.

With the exception of a few observations on cynanche maligna and tetanus, the preceding work contains the results of my own experience. The following deductions from the facts which that experience has enabled me to establish, will farther disclose my views with respect to a subject that has been occupying my attention for years.

Typhus.

To confine medical practice in fever to one class of remedies, when various symptoms require a diversity of treatment, would be equally vain and improper. But if I have succeeded in showing the importance of preserving a regular state of the body throughout the course of typhus, by means of purgative medicines; if I have made it appear that, by these means, stomachic symptoms, and others which depend upon them, and which are the source of much distress, and not unfrequently of danger, are relieved and obviated; I think I am warranted to infer, that the same benefit may be obtained in other fevers, which, although differing in some things from typhus, yet agree with it in being accompanied with symptoms of stomachic distress.

The justness of this inference is exemplified in the bilious remitting fever of warmer climates, in which practitioners seem now to be agreed, that the safety of those attacked with this fever is in-

timately connected with the early, the full, and regularly continued evacuation of the bowels.

Dr RUSH, in his account of this fever, as it appeared in Philadelphia, in the year 1793, Edinburgh edition, 1796, page 173, says, “ The effects of purging were as follows :

“ 1st, It raised the pulse when low, and reduced it when preternaturally tense or full.

“ 2d, It revived and strengthened the patient. This was evident in many cases, in the facility with which patients who had staggered to a close-stool walked back again to their beds after a copious evacuation. Dr Sydenham takes notice of a similar increase of strength after a plentiful sweat in the plague. They both acted by abstracting excess of stimulus, and thereby removing indirect debility.

“ 3d, It abated the paroxysm of the fever. Hence arose the advantage of giving a purge in some cases in the evening, when an attack of the fever was expected in the course of the night.

“ *4th*, It frequently produced sweats, when given on the first or second day of the fever, after the most powerful sudorifics had been taken to no purpose.

“ *5th*, It sometimes checked that vomiting which occurs in the beginning of the disorder ; and it always assisted in preventing the more alarming occurrences of that symptom, about the fourth or fifth day.

“ *6th*, It removed obstructions in the lymphatic system. I ascribe it wholly to the action of the mercury, that in no instance did any of the glandular swellings, which I formerly mentioned, terminate in a suppuration.

“ *7th*, By discharging the bile through the bowels, as soon and as fast as it was secreted, it prevented, in most cases, a yellowness of the skin.”

Mr BRYCE, surgeon, late of the Busbridge, East-Indiaman, gives an account, published at Edinburgh 1796, of a fever which broke out among the ship's company of the Busbridge,

during a passage from England to Madras and Bengal, in summer 1792, which, on perusing the publication of Dr Rush and Dr Chisholm, after his return in 1795, he found to be the same with that described by these gentlemen, and which had proved so destructive in the West, page 8. In the treatment of this fever Mr Bryce was eminently successful. Notwithstanding the nature of the fever, and the disadvantages and privations arising from situation, of two hundred and fifty that were attacked with the disease, he lost only three, page 7; and in these instances it would appear the fatal termination might be attributed in part to incidental circumstances, pages 37, 38, 39.

A history of this fever is given, and the method of cure detailed; in conducting which, drastic purgatives were employed, by means of which, provided early recourse was had to them, complete control over this cruel distemper, even in its most formidable attacks, was acquired, page 49.

Calomel, either by itself, or combined with other powerful cathartics, is Mr Bryce's fa-

vourite remedy, page 52. Glysters were frequently of use in accelerating the action of the calomel, but not in the advanced stage of the disease, page 61.—“ The stools,” says Mr Bryce, “ procured by medicine were dark-coloured, often quite black, of a shining appearance, very viscid, and emitted an excessively putrid fœtor.” “ To these evacuations by stool only, however, did the above threatening symptoms yield ; and it was always observable, that the more dark-coloured and fetid such discharges were, the more easily and certainly did the symptoms disappear ; their good effects were so instantaneous, that a man carried upon deck perfectly delirious, with subsultus tendinum, and in the state of the greatest apparent debility, after a copious evacuation of this kind, has returned of himself, composed, astonished at his newly acquired strength, and declaring himself to be infinitely recovered ; which was indeed evident to every one from his changed countenance and general appearance.” Here Mr Bryce remarks, “ that he never saw a disease where the countenance so surely indicated either danger or returning health.”—pages 33, 34.

Mr JAMES ANDERSON, late surgeon of his Majesty's 60th Regiment, published at Edinburgh, 1798, "A few Facts and Observations on the Yellow Fever of the West Indies."

Mr Anderson says, page 19, "I am of opinion, that there is one grand object to be held in view, in almost every fever of the West Indies, viz. proper evacuations downwards; and, if that practice is pursued in a requisite manner, at an early period of the disease, I have every reason to think, it will be attended with the happiest effects."

After employing different purgative medicines, Mr Anderson remarks, page 20.—"A short time after this I had an opportunity of experiencing the good effects of calomel, conjoined with James's powders, as superior to every other medicine I had tried, and in which I would place the greatest dependance, in the cure of this dreadful scourge of our army in the West Indies."

"Judging *a priori*," page 30, "a person would be apt to suppose, that free evacuations downwards would very much debilitate the patient in

that hot climate ; but the sensation of the patient is quite the reverse, as he feels himself wonderfully relieved after a few evacuations ; and is by no means so depressed with languor and anxiety, as before the operation of the medicine.

“ I found nothing so effectually removed the great irritation of the stomach, which is so much to be dreaded in this disease, as the operation of these medicines ; and the James’s powder had likewise the effect of bringing on a free and equal perspiration.”

Scarlatina.

Benefits similar to those which I have shewn to follow the exhibition of purgatives in scarlatina, might be expected from a similar practice in some other exanthemata. Experience has, I believe, proved this inference to be just in respect of measles and erysipelas ; and it is well known, that much of the cooling regimen, so much valued in small-pox, consists in the free use of purgative medicines.

Marasmus.

If I might depend on the opinion which results from my own observation, I should say, that the marasmus of which I have spoken attacks most generally children of scrofulous constitutions. If purgatives, therefore, be employed successfully, as I have shewn them to be, in the cure of this marasmus, it follows, that they will be serviceable in scrofula, if not the most useful remedies that can be employed for relieving that malady. And the more so, when we advert to this circumstance, that scrofulous children have frequently tumid bellies, the effect of tardy bowels, and of accumulated feces, which are again undoubtedly a secondary cause of some symptoms, improperly referred to the general scrofulous contamination, and for which remedies are sought in various specifics, which, though innocent in themselves, lead to the postponement or careless exhibition of the more efficacious, and certain purgative.

Chlorosis.

The early, and indeed the principal symptoms of chlorosis are those of dyspepsia, or deranged state of the stomach and bowels. These again give rise to others, which characterise the latter periods of the disease. As I have shewn that chlorosis in all its stages, perhaps indeed the last of extreme debility excepted, is to be cured by purgative medicines, I conclude, that dyspepsia, whether simple or complicated with a diseased state of the mind, under the appearance of hysterical or hypochondriacal mania, may be very much relieved, if not entirely cured, by purgative medicines duly administered, as the remedy upon which the patient's recovery depends, and not as at present, with a secondary view only, in aid of tonic and stimulant medicines, on which the practitioner rests his hopes of a cure.

Chorea Sancti Viti.—Hysteria.

The spasmodic affections in hysteria and chorea Sancti Viti are removed by the sole efficacy

of purgative medicines. Spasms, therefore, which attack the extremities, and sometimes the stomach, or rather the diaphragm, and which are known by the name of cramp, may, in some instances, arise from the loaded state of the stomach and bowels, and may be remedied by a proper course of purgative medicines. My experience leads me to think that this is the case. ~

Palpitation of the heart deserves particular notice in this place. It is not an uncommon attendant on disorders of the stomach; it is considered, indeed, as a symptom of dyspepsia. On some occasions, when it has been of long standing, and so violent and persevering, as to have been the immediate cause of death, no organic disease has been discovered to which it might have been referred. I have repeatedly witnessed the power of purgative medicines over this species of spasm; and I have been astonished at the complete cures which I have made of it, in the most forbidding, and apparently desperate cases. I am now accustomed not to despair of any patient labouring under this formidable disease, till I am satisfied that purgative medicines have been fully employed, and employed in vain.

Tetanus.

If my reflections on tetanus, the most painful and most fatal of all spasmodic ailments, tend to elucidate this intricate disease, and to give sanction to a practice at once grateful and salutary to the sufferer, a practitioner, without indulging too much in the application of speculative principles, may extend similar views to those cases of hydrophobia that are not the effect of specific contagion ; but which, in their cause and leading features, bear a striking resemblance to tetanus, and equal it in severity and fatality. Under the impression which I feel of the utility of purgative medicines, and of the inefficacy of the tonic plan of treatment in tetanus, no doubt would remain with me, respecting the mode of attempting the cure of hydrophobia : for this disease has hardly, in any instance, yielded to the most powerful antispasmodics, even when carried to an extent which has bordered on the extinction of life. Antispasmodics are directed, how fruitlessly soever, with the view of alleviating a single symptom. Purgatives are proposed to remove a cause which frequently induces, and

which may always aggravate spasmodic affections.

While I have been thus occupied in ascertaining the utility of purgative medicines, and the safety of them in the administration, it will not be thought surprising that there are some things respecting these medicines themselves, of which I cannot give a satisfactory account. I am at a loss to distinguish precisely between those that act more particularly on the smaller, and those whose influence is exerted on the larger intestines. I am likewise unable to speak always decisively on the mode of exhibiting purgative medicines, whether in full doses at long intervals, or in reduced doses more frequently repeated; whether, on some occasions, a course of purgatives at home, will not be equally serviceable as one of purging mineral waters at their fountain heads; and whether and how far collateral aid may be derived from warm and cold-bathing, and from mercury, to promote the efficacy of purgatives. Although I undoubtedly have my opinion on these points, by which my conduct is directed, yet it is not so fully established as to enable me

to give it with confidence to the public in a detailed or systematic manner. These, and other circumstances connected with the important practice by purgatives, will therefore remain the subjects of future investigation.

But in whatever manner purgatives are given for the cure of the diseases of which I have treated, I must again solicit attention to two circumstances, of infinite importance to the success of the practice. One is, the regular and accurate examination of every alvine evacuation; and the other, the steady exhibition of the purgative medicine, so that its full effect may be daily procured during the continuance of the disease for which it is given. The present state of the practice, and of the public mind respecting it, requires this admonition.

By inspection, the practitioner learns the nature, of the alvine discharge, a knowledge of which enables him to form a probable conjecture with regard to the ailment; to regulate the strength of each succeeding dose of the purgative; and to determine the frequency of it. Without this inspection, he will be constantly deceived,

through the ignorance or inattention of his patients, or their attendants.

The steady exhibition of purgative medicines in full doses, is absolutely necessary to the success of the practice in the diseases of which I have spoken. The puny and debilitated state of the sufferer, may on some occasions excite alarm in the breast of the practitioner ; and the caprice of his patient, and the whims of relatives, may oppose obstacles to his conducting the cure in the most advantageous manner. But these he must disregard ; for unless he can suppress his own improper feelings, and overcome the unreasonable objections of others, he had better not adopt measures, which, to prove successful, must be conducted with firmness. A contrary conduct will necessarily terminate in the vexation of the practitioner, a disappointment of the patient and relatives, and in the discredit of that practice which it has been my wish and study to recommend.

If some of the diseases of which I have treated be cured solely by purgative medicines, and if this cure can be effected more or less speedily,

in proportion to the length of time that constipation and the changed nature of the feces have subsisted, I am persuaded that the preservation of the regularity of the alvine evacuation will at all times prevent the accession of those diseases. If these expectations be not too sanguine, it is likely that the marasmus and chlorosis, the vomiting of blood, chorea and hysteria, of which I have spoken, will, under this management, rarely, if ever, appear. It is fitting, therefore, that this observation should be widely spread; that it should be conveyed to mothers and nurses, to superintendants of nurseries, of manufactories, and of boarding-schools, and to all instructors and protectors of children and young people; and strongly impressed on their minds by such of their medical advisers, as think with me, who will acknowledge, that to prevent disease is their paramount duty.

To conclude, the reader must have observed the beneficial effects of purgative medicines, in diseases apparently different, and incident to people at various periods of life. The facts are undeniable, and serve to prove the extent and importance of the subject; but of these I do not feel

it to be incumbent on me to give any explanation at present. Such an attempt might be premature. I am satisfied to have established certain leading facts, and to have opened views, which, if properly prosecuted, must give an opportunity to extend our knowledge respecting the utility and administration of purgative medicines. It will then be time to generalize the facts, and to form a system of medical doctrines at once clear and comprehensive, and thence to deduce practical precepts, useful in proportion as they will be simple and precise. When these expectations are fulfilled, our posterity may see deceptive reasoning, how ingenious soever, banished from the schools of medicine ; and from the practice of the healing art, a multifarious prescription of inert and nauseous medicines.

APPENDIX.

APPENDIX.

The Appendix contains Tables of the Old and New Nomenclature of the articles of the Materia Medica, as well as of the Formulæ for Compound Medicines peculiar to the Pharmacopœia of the Royal Infirmary, which are prescribed or mentioned in this Work. It comprehends also Histories of Diseases, opinions of Authors, and Communications made to the Author, Illustrative of the foregoing Observations.



APPENDIX I.

ALIQUOT abhinc annis nomina medicamentis tam simplicibus quam compositis indita, commutata sunt; et tituli horum antiquiores, in primis morborum historiis quæ locum obtinent in hæce appendice, tantummodo reperiuntur. In historiis etiam recentioribus haud raro obrepunt hi tituli: cum enim consuetudini addictus essem, et plurimis ægris eodem tempore in Nosocomio adessem, timebam ne in errorem inciderem, si normam præscribendi medicamenta hodiernam, ad amissim, servare conatus fuissim.

Nequid, igitur, ambigui oriretur, et ut lectoris commoditati inservirem, tres tabulas in hocce appendicis numero inserendas curavi. E prima et secunda tabula facile patebit nexus qui inter titulos medicamentorum priores et posteriores intercedit. Tabula tertia exhibet formulas medicamentorum compositorum quibus usus sum, et quæ Pharmacopoeiæ Nosocomii propriæ sunt. Cum vero hæce Pharmacopoeia nequaquam penes unumquemque sit, tabulam istam eo magis necessariam existinavi.

TABULA PRIMA

EXPONIT MEDICAMINUM TITULOS PRIORES ET POSTERIORES.

TITULI PRIORES.				TITULI POSTERIORES.			
Alkali fixum vegetabile purifica-	}	-	-	Carbonas potassæ.	}	-	-
tum				Carbonas ammoniæ.			
Ammonia preparata				Tartris antimonii.			
Antimonium tartarisatum	}	-	-	Gummi resina ferulæ assæfæti-	}	-	-
Assafætida				dæ.			
Bolus jalapæ cum mercurio				Bolus jalapæ compositus.			
Calomelas	}	-	-	Submuriæ hydrargyri.	}	-	-
Crystalli tartari				Supertartris potassæ.			
Cornu cervi				Carbonas ammoniæ.			
Cremor tartari	}	-	-	Supertartris potassæ.	}	-	-
Extractum catharticum				Pilulæ aloes cum colocynthide.			
Extractum colocynthidis com-				Glycirrhiæ glabra.			
positum	}	-	-	Oxydum hydrargyri cinereum.	}	-	-
Glycirrhiæ				Convolvulus Jalapæ.			
Hydrargyrus precipitatus cine-				Tinctura opii.			
reus	}	-	-	Citrus medica.	}	-	-
Jalapæ				Linum usitatissimum.			
Laudanum				Carbonas potassæ.			
Limon	}	-	-	Aqua potassæ.	}	-	-
Linum				Carbonas magnesiæ.			
Lixiva purificata				Magnesiæ.			
Lixivium causticum	}	-	-	Sulphas magnesiæ.	}	-	-
Magnesiæ alba				Oxydum hydrargyri cinereum.			
Magnesiæ usta				Submuriæ hydrargyri.			
Magnesiæ vitriolata	}	-	-	Pilulæ rhei compositæ.	}	-	-
Mercurius cinereus				Myrtus pimenta.			
Mercurius dulcis							
Pilulæ stomachicæ	}	-	-				
Pimenta							

TITULI PRIORES.

Potio cretacea	-	-
Sal catharticus amarus	.	.
Sal Glauberi	-	-
Sal rupellensis	-	-
Senna	-	-
Soda phosphorata	-	-
Soda tartarizata	-	-
Soda vitriolata	-	-
Spiritus Mindereri	-	-
Squamæ ferri purificatæ	-	-
Tartarus emeticus	-	-
Tartarum vitriolatum	-	-
Tinctura jalapæ	-	-
Tinctura thebaica	-	-

TITULI POSTERIORES.

Potio carbonatis calcis.
Sulphas magnesiæ.
Sulphas sodæ.
Tartris sodæ et potassæ.
Cassia senna.
Phosphas sodæ.
Tartris sodæ et potassæ.
Sulphas sodæ.
Aqua acetitis ammoniæ.
{ Oxidum ferri nigrum purifica-
tum.
Tartris antimonii.
Sulphas potassæ.
Tinctura convolvuli jalapæ.
Tinctura opii.

TABULA SECUNDA

EXPONIT MEDICAMINUM TITULOS POSTERIORES ET PRIORES.

TITULI POSTERIORES.

Aqua acetitis ammoniæ	-	-
Aqua potassæ	-	-
Bolus jalapæ compositus	-	-
Carbonas ammoniæ	-	-
Carbonas magnesiæ	-	-
Carbonas potassæ	-	-
Cassia senna	-	-
Citrus medica	-	-
Convolvulus jalapa	-	-
Glycirrhiza glabra	-	-
Gummi resina ferulæ assæfætidæ	-	-
Laudanum	-	-
Linum usitatissimum	-	-
Magnesia	-	-
Myrtus pimenta	-	-

TITULI PRIORES.

Spiritus Mindereri.
Lixivium causticum.
Bolus jalapæ, cum mercurio.
Ammonia preparata.
Magnesia alba.
{ Lixiva purificata.
{ Alkali fixum vegetabile purifica-
tum.
Senna.
Limon.
Jalapa.
Glycirrhiza.
Assæfætidæ.
Tinctura opii.
Linum.
Magnesia usta.
Pimenta.

TITULI POSTERIORES.	TITULI PRIORES.
Oxydum ferri nigrum purificatum - -	{ Squamæ ferri purificatæ.
Oxydum hydrargyri cinereum	{ Mercurius cinereus. Hydrargyrus præcipitatus cinereus.
Phosphas sodæ - -	Soda phosphorata.
Pilulæ aloes cum colocynthide	{ Extractum catharticum. Extractum colocynthidis compositum.
Pilulæ rhei compositæ -	Pilulæ stomachicæ.
Potio carbonatis calcis -	Potio cretacea.
Submurias hydrargyri -	Calomelas, mercurius dulcis.
Sulphas magnesiæ - -	Sal catharticus amarus.
Sulphas potassæ - -	Tartarum vitriolatum.
Sulphas sodæ - -	{ Sal Glauberi. Soda vitriolata.
Supertartris potassæ -	{ Crystalli tartari. Cremor tartari.
Tartris antimonii -	{ Antimonium tartarisatum. Tartarus emeticus.
Tartris sodæ et potassæ -	{ Sal rupellensis. Soda tartarisata.
Tinctura convolvuli jalapæ -	Tinctura jalapæ.
Tinctura opii - -	{ Laudanum. Tinctura thebaica.

TABULA TERTIA.

QUA, INNOTESCUNT FORMULÆ MEDICAMINUM COMPOSITORUM, QUORUM MENTIO FIT IN HISCE PAGINIS, ET QUÆ PHARMACOPOEIÆ NOSOCOMII REGII EDINBURGHENSIS, PROPRIÆ SUNT.

Bolus Jalapæ Compositus.

R. Pulveris radicis convolvuli jalapæ grana quindecim,
Calomelanos, grana quinque,
Conservae rosæ Gallicæ, quantum satis sit.

DECOCTUM Furfuris.

R. Furfuris uncias duas,
 Aquæ fontanæ libras duodecim,
 Coque ad libras novem, cum subsederint feces, elutriandas.

ENEMA Domesticum.

R. Muriatis sodæ unciam dimidiam,
 Olei napi silvestris unciam,
 Aquæ tepidæ libram. Misce.

ENEMA Fœtidum.

R. Gummi resinæ ferulæ assæfœtidæ drachmas duas,
 Aquæ tepidæ uncias decem. Solve.

ENEMA Purgans.

R. Foliorum cassiæ sennæ drachmas tres,
 Sulphatis sodæ unciam,
 Aquæ fervidæ libram,
 Infunde et cola.

HAUSTUS Anodynus.

R. Tincturæ opii guttas viginti quinque,
 Aquæ fontanæ unciam,
 Syrupi simplicis drachmas duas. Misce.

HAUSTUS ex oleo Ricini.

R. Olei ricini unciam dimidiam,
 Aquæ distillatæ unciam,
 Spiritus myrti pimentæ drachmam,
 Aquæ potassæ causticæ guttas viginti. Misce.

HAUSTUS salinus effervescens.

- R. Carbonatis potassæ purificati scrupulos quatuor,
Aquæ fontanæ uncias quatuor. Solve, et cum subsederint feces, cola.
- R. Succus citri medicæ uncias duas,
Syrupi simplicis,
Aquæ fontanæ, utriusque unciam. Misc.
- Utriusque mixturæ uncia detur pro dosi; solutione carbonatis potassæ prius sumpta, mistura è succo citri medicæ, illico porrigenda est.

INFUSUM cassiæ sennæ.

- R. Foliorum cassiæ sennæ unciam et dimidiam,
Seminum coriandri sativi contusorum unciam et dimidiam,
Supertartritis potassæ drachmas duas,
Aquæ fontanæ libram.
- Supertartritrem potassæ in aqua coquendo solve; deinde liquorem adhuc ferventem sennæ et seminibus affunde; macera per horam in vase operto, et frige factum cola.

INFUSUM lini usitatissimi.

- R. Seminum lini usitatissimi uncias duas,
Radiciis glycyrrhizæ glabræ unciam dimidiam,
Aquæ ferventis libras quatuor.
- Infunde ad focum per horas aliquot, et cola.

MISTURA cinchonæ aromatica.

- R. Pulveris corticis cinchonæ unciam dimidiam,
Mucilaginis mimosæ niloticæ uncias duas.
- Tere simul et paulatim adde

Aquæ fontanæ uncias quinque,
Tincturæ lauri cassiæ unciam unam et dimidiam.
Misce.

MISTURA diaphoretica antimonialis.

R. Aquæ fontanæ uncias quinque et dimidiam,
Sacchari purificati drachmam unam et dimidiam,
Vini tartritis antimonii drachmas duas,
Tincturæ opii guttas triginta. Misce.

MISTURA diaphoretica salina.

R. Aquæ acetitis ammoniæ,
Aquæ fontanæ, utriusque uncias tres,
Carbonatis ammoniæ grana decem,
Syrupi simplicis drachmas sex. Misce.

MISTURA mucilaginosæ.

R. Decocti althææ officinalis uncias quatuor,
Syrupi simplicis unciam dimidiam. Misce.

MISTURA salina ammoniata.

R. Succo citri medicæ unciam et dimidiam,
Carbonatis ammoniæ præparati drachmam dimidiam,
vel quantum sufficit ad acidum saturandum,
Aquæ fontanæ uncias tres et dimidiam,
Syrupi simplicis unciam. Misce.

POTUS acidus vegetabilis.

R. Decocti furfuris uncias triginta,
Supertartritis potassæ scrupulos quatuor,
Syrupi simplicis uncias duas. Misce.

SOLUTIO gummi resinæ ferulæ assæ fœtidæ.

R. Gummi resinæ ferulæ assæfœtidæ drachmas quatuor,
Aquæ fervidæ uncias viginti quatuor. Solve.

APPENDIX II.

TYPHUS.

SECT. I.

CASES OF PATIENTS WHO LABOURED UNDER TYPHUS
FEVER, EXTRACTED FROM THE RECORDS OF THE
ROYAL INFIRMARY.

Royal Infirmary, 21st Aug. 1796.

JOHN DENHAM, Ætatis 11.—Complains much of
headach, vertigo, general uneasiness, and sickness. Pulse
120, skin very hot, tongue loaded, much thirst, belly rather
slow, no appetite, indifferent nights.

Complaints began on the 18th current.

He had an emetic on the 19th, with some temporary relief.

Injiciatur enema domesticum.

22d.—One stool, restless during night, skin dry, and of
a pungent heat, tongue loaded, pulse about 120, and full,
abdomen feels tense, and is painful.

R. Mercurii dulcis,
Pulveris jalapæ,
Sacchari albi, singulorum grana tria.
Tere in pulverem quam primum sumendum.

Toast and water for drink.

23d Aug.—A bad night, with delirium; skin continues hot, tongue more loaded, pulse towards 120, less full, much thirst, two scanty stools.

Injiciantur quam primum enematis domestici uncix decem.

R. Foliorum sennæ drachmam unam,
Extracti glycyrrhizæ drachmam dimidiam,
Aquæ fervidæ uncias octo.
Sit infusum duabus vicibus sumendum.

24th.—A better night, with less delirium; skin less pungently hot, pulse about 120, and soft, tongue less loaded, and moist, complains of headach, considerable thirst, a copious stool from the injection, another since taking the physic, belly seems somewhat distended; he complains on its being pressed.

Repetatur enema domesticum vespere, et habeat haustum, cum tincturæ thebaicæ guttis quindecim.

25th — Easy during the first part of the night; restless with delirium since morning, belly more distended, and pained on pressure, tongue more loaded and parched, a loose feculent stool after the injection, a similar one since morning, which, as well as the urine, has been voided without notice, pulse about 120, of middling strength, skin moderately cool.

R. Aquæ uncias quatuor,
Magnesiæ ustæ drachmam unam,
Sacchari drachmam dimidiam.

Sit mistura cujus sumatur uncia dimidia, omni hora.
Repetatur haustus anodynus vespere.

26th Aug.—Three stools since yesterday, the first of a natural appearance, the two last watery and greenish, a lumbricus has been voided, fulness and pain of abdomen much abated, skin cool, tongue clean, pulse about 90, feeble, mixture used, a good night.

Repetatur mistura cum magnesia, necnon haustus vespere.

27th.—Two loose and green-coloured stools voided in bed since yesterday, fulness of abdomen gone, no complaint on pressure, tongue clean, pulse about 80, tolerably firm, skin cool, sensible to the stimulus of urine, a good night, appetite returning.

Continuentur haustus et mistura cum magnesia.

28th.—Is at present asleep, he has had a good night; two stools not passed in bed, some food taken this morning.

Continuentur haustus et mistura.

29th.—No stool, a good night, now asleep, appetite improving.

Continuetur mistura c magnesia.

Omittatur haustus anodynus.

Habeat jusculi bovini libram unam, indies.

31st.—Another lumbricus, of a large size, voided since yesterday, belly regular, pulse about 80 and soft, tongue clean, appetite good, an easy night.

Continuetur magnesia alba.

10th Sept.—Gradual convalescence.

Dismissed cured.

Royal Infirmary, 31st Aug. 1796.

JAMES M'KECHNY, *Ætatis* 20.—Complains of
headach, pain in his back, general uneasiness and sickness.

Has at times a slight cough, but no particular uneasiness
about his breast.

Belly regular, considerable thirst, tongue white, pulse
110, pretty full, skin hot, tolerable nights.

Complaints began nine or ten days ago, and have been
frequently attended with shivering.

Has used no medicines.

1st Sept.—Sumat pulveris jalapæ compositi drachmam dimi-
diam.

Habeat decoctum furfuris pro potu.

2d.—Headach abated, cough and thirst continue, pulse
about 100, an indifferent night, as yet no stool.

Repetatur quam primum pulvis jalapæ compositus.

Habeat vespere si opus sit enemata domesticum.

Hauftum anodynum hora somni.

5th.—Free passage of belly previous to the injection,
headach and cough gone, pulse calm, appetite returning.

6th.—Convalescent,

Full diet.

10th.—Dismissed cured.

Royal Infirmary, 29th Sept. 1796.

ROBERT GRANT, Ætatis 21.—Complains of head-ach, vertigo, nausea, chilly fits, succeeded by heat and sweating, great uneasiness and oppression, much thirst, and loss of appetite.

Pulse 96, tongue very foul, skin at present moist, belly regular, sleeps indifferently; on the 19th, after exposure to cold, while on guard in the night-time, was seized with headach, coldness, shivering, and prostration of strength; he has continued daily worse since that time, although he took an emetic on the 20th.

30th Sept.—Febrile symptoms continue, pulse about 90, somewhat full, tongue pretty clean and moist, a stool in the course of yesterday.

R. Pulveris jalapæ grana decem,
 Mercurii dulcis grana tria. Sit pulvis quam pri-
 mum sumendus.
 Potum acidum vegetabilem, ad libitum.

1st Oct.—Two copious stools, after an injection in the evening, febrile symptoms much abated, skin moist, pulse calm.

2d.—Convalescent.
 Full diet.

12th.—Dismissed cured

Royal Infirmary, 5th Sept. 1796.

JONATHAN GREEN, *Ætatis* 22.—Complains of headach, pain of back, general uneasiness, and sickness.

Pulse 96, skin cool, tongue white, thirst natural, belly rather loose, appetite bad, urine high-coloured, sleeps ill.

Complaints began yesterday, with shivering, followed by increased heat and sweating; attributes them to cold and wet, having been exposed to the rain, for a considerable time, on Saturday last, 3d current.

Has used no medicines.

6th Sept.—Habeat quam primum,
Vini ipecacuanhæ unciam unam pro emetico.
Cras mane,
Pulveris jalapæ compositi drachmam dimidiam.

7th.—Full vomiting, febrile symptoms abated, pulse calm, three stools.

Full diet.

10th.—Aggravation of headach, with feebleness and languor, pulse about 120, belly slow.

Habeat quam primum, pulveris jalapæ compositi scrupulos duos.

Low diet.

11th.—As yet no stool, headach continues, pulse about 100, rather feeble.

Habeat vespere, enema domesticum, et ni plene responderit alvus, pulveris jalapæ compositi drachmam unam cras mane.

12th Sept.—One stool by the injection, four by the physic this morning, headach relieved, and countenance lightened.

13th.—Frequent scanty stools, since yesterday, with gripes and tenesmus, much thirst, tongue white, pulse about 100.

R. Sodæ tartarisatæ drachmas sex,
 Aquæ uncias duodecim.
 Sit solutio quam primum, duabus vicibus sumenda.
 Habeat haustum anodynum vespere.

Toast and water for drink.

14th Sept.—Gripes and purging gone, tongue white, rather loaded, pulse about 90.

Repetatur cras mane solutio sodæ tartarisatæ.

16th.—Convalescent.
 Full diet.

19th.—Slight headach at times, belly open, pulse about 90.

Habeat potionis cretaceæ unciam unam ter de die.

21st.—Belly regular, slight headach continues.

Sumat pulveris corticis Peruviani drachmam dimidiam
 quater indies.
 Intermittatur potio cretacea.

26th.—Headach gone, belly regular.
 Dismissed cured.

Royal Infirmary, 13th Sept. 1796.

ROBERT MUCKLE, *Ætatis* 17.—Complains of pain of head, back, general uneasiness, and weakness.

Pulse 84, skin natural, thirst urgent, tongue white, with bad taste in his mouth, appetite impaired, belly regular, urine natural, sleeps ill.

Complaints first began on Saturday the 10th inst. with shivering, succeeded by increased heat, and sweating.

Knows no cause.

Took an emetic yesterday, with relief.

14th Sept.—Headach and thirst continue, pulse about 80, skin warm, two stools, indifferent night.

Habeat quam primum,
Bolum e jalapa cum mercurii granis tribus.

15th.—Pain shifted to the hind-head and neck, thirst continues, no stool.

R. Foliorum sennæ,
Crystallorum tartari, utriusque drachmam unam,
Aquæ fervidæ uncias octo.
Sit infusum quam primum sumendum.

17th.—Pain chiefly occupies the hind-neck, in other respects convalescent.

Oblinatur cervix qua dolet,
Oleo ammoniato et tegatur panno laneo.

21st.—Pain of head and neck gone, slight pain betwixt the scapulæ, otherwise well.

Intermittatur oleum ammoniatum.

Full diet.

26th.—Dismissed cured.

Royal Infirmary, 14th Sept. 1796.

JOHN FAIRGRAVE, Ætatis 19.—Complains of pain of head, vertigo, sickness, general uneasiness, and weakness.

Pulse 68, skin hot, tongue white, thirst, appetite bad, urine natural, belly loose, sleeps pretty well.

These complaints first commenced yesterday morning; he was seized with shivering, increased heat, succeeded by sweating.

Knows no cause.

Took an emetic yesterday forenoon, with relief.

Two stools since admission.

Habeat quam primum,
Bolum jalapæ cum mercurii granis tribus.

15th Sept.—One copious, and two smaller stools, an easy night, febrile symptoms abated, pulse about 60, and soft.

16th.—Convalescent.

Full diet.

17th.—Psora.

Habeat unguentum sulphuris more solito.

18th Sept.—Psora yields, pulse about 50.

23d.—Habeat balneum tepidum.
Intermittatur unguentum sulphuris.

24th—Dismissed cured.

Royal Infirmary, 19th April, 1798.

DONALD WATSON, *Ætatis* 23.—Complains of severe pain in his head, with general soreness, pulse about 90, tongue white, thirst considerable, appetite impaired, no stool since the 16th instant, on which day his complaints began with shivering.

R. Mercurii dulcis grana quinque,
Pulveris jalapæ grana duodecim,
Sit pulvis quam primum sumendus.

20th April.—Two stools, tongue loaded, pulse towards 108, and full, thirst moderate, a tolerable night, and still disposed to sleep.

Cras mane repetatur pulvis e mercurio dulci et jalapa.

21st.—Another stool in the evening, none since the exhibition of the powder, headach continues, pulse about 90, and soft, tongue still loaded.

Habeat, si opus sit, enema domesticum vespere.

22d.—Three scanty stools in the course of yesterday, headach relieved, tongue less loaded, skin cool and moist, pulse calm, a good night.

Cras mane habeat pulveris jalapæ compositi drachmam unam.

23d April.—A good night, several stools, tongue clean, pulse calm.

27th.—Convalescent.

Dismissed cured.

Royal Infirmary, 20th April, 1798.

JAMES DENNET, *Ætatis* 12.—Complains of pain in his head, and in his belly, of vertigo, great sickness, and occasional vomiting, pulse about 100, tongue white, considerable thirst, appetite impaired, belly bound. These symptoms commenced with shivering on the 16th, and he had been exposed to the contagion of fever.

21st April.—A natural stool, no recurrence of vomiting, headach and sickness continue, pulse about 120, skin hot.

Habeat pulveris jalapæ compositi scrupulum.

Haustum cum tincturæ thebaicæ guttis quindecim hora somni.

22d.—Headach and sickness relieved, tongue clean and moist, pulse quick and feeble, two stools previous to giving the powder, and two since, a good night.

Habeat misturæ diaphoreticæ salinæ unciam tertia quaque hora.

Repetatur haustus, hora somni.

23d.—A good night, still disposed to sleep, free of complaint.

Omittatur haustus.

24th April.—Gripes in the course of yesterday, two stools since morning, fifteen grains of compound powder of jalap being given, pulse quick, skin warm, tongue white, still drowsy, gripes continue.

Habeat vini ipecacuanhæ drachmas sex, pro emetico.

25th.—Two dark-coloured stools, no vomiting, gripes gone, a quiet night.

30th.—Convalescent. Full diet.

11th May.—Dismissed cured.

Royal Infirmary, 17th May, 1798.

JAMES GRANT, *Ætatis* 18.—Complains of great pain in the umbilical and epigastric regions; of severe headach and much sickness, with general uneasiness and lassitude. His internal fauces are painful, and there is an eruption of reddish spots over his face and most of his body. Pulse about 90, belly slow, appetite impaired, tongue rather white, has great thirst.

On the 12th current he was affected with shivering; the spots appeared about the 15th, and have been increasing since that time; the affection of his throat has likewise been increasing. He had been recovered eight days from a febrile attack, which had continued for a fortnight without any eruption.

He took an emetic on the 13th, which relieved in some degree the pain of his head. He took also some pills on the 15th, which acted as a laxative.

Habeat enema purgans.

18th May.—Pain of abdomen, affection of internal fauces and eruption continue, skin moderately warm, pulse about 80, and soft, a costive stool.

Habeat quam primum,
Pulveris jalapæ,
Mercurii dulcis, utriusque grana sex.
Potum acidum vegetabilem ad libitum.

19th.—A costive stool in the evening, after an injection, pain of abdomen, affection of throat, and eruption, stationary, tongue loaded, much thirst, pungent heat of skin, pulse about 80.

R. Sodæ vitriolatæ drachmas sex,
Sacchari drachmas duas,
Crystallorum tartari,
Foliorum sennæ, utriusque drachmam,
Aquæ fervidæ uncias sedecim.
Fiat infusum quam primum sumendum.—Tegantur fauces panno laneo.

20th.—Complaints stationary, a bad night, tongue still loaded, with thirst, skin cooler, pulse about 80, four dark-coloured stools.

Habeat haustum anodynum vespere.
Cras mane infusi sennæ unciam et dimidiam.
Seri vinosi libras duas, partitis vicibus indies.

21st.—Pain of abdomen is abated, that of internal fauces, which appear considerably inflamed, continues; eruption, copious on the face, is less frequent on the rest of the body, heat of skin again more pungent, pulse about 100, thirst urgent, no stool, indifferent night.

Habeat si opus sit enema domesticum.

22d May.—A copious dark-coloured stool after the injection, affection of throat and eruption continue, pulse about 90, of moderate strength, skin of a less pungent heat, thirst not abated.

Addantur haustui tiucturæ thebaicæ guttæ decem.

23d.—Pain of epigastrium has recurred, pain of fauces continues, skin less hot, pulse about 80, soft and firm, no stool, an indifferent night.

Habeat quam primum infusi sennæ uncias duas.
Repetatur haustus.
Intermittatur serum vinosum.

24th.—Two dark-coloured stools, pain of epigastrium and fauces relieved, eruption fading, tongue cleaner, pulse about 80, and soft, skin moist, thirst abated, a good night.

26th.—Convalescent, belly rather slow.

Habeat omni mane pulveris rhei grana decem.
Intermittatur haustus.

Full diet.

30th.—Belly has been regular.

Dismissed cured.

Royal Infirmary, 7th Aug. 1801.

JOHN BAIRD, Ætatis 11.—On the 2d instant, by account, was suddenly attacked with rigors, increased heat, and general sweat. Since admission, he has been very in-

distinct, and frequently, while awake, is observed to mutter and speak to himself: while asleep, he often starts, and awakes in a fright. Pulse 130, and weak, skin very warm, tongue clean, some thirst, the day before his illness was exposed to febrile contagion, a scanty stool since admission, no remedies employed.

Habeat quam primum enema domesticum.

8th Aug.—A scanty loose stool, pulse about 120, and rather feeble, tongue white, more distinct, injection not given.

Habeat quam primum bolum è jalapa, cum mercurii granis tribus.

Decoctum furfuris ad libitum.

9th.—Two or three stools, skin cool, pulse about 90, a good night, and disposed to sleep, making no complaint.

Continuetur decoctum furfuris.

10th.—Has had delirium and irregular convulsive motions, belly slow, pulse feeble.

Repetatur bolus è jalapa cum mercurio,
Abradatur capillitium.

Habeat vini rubri uncias octo,
Cujus sumat unciam subinde.

11th.—Delirium and involuntary motions still continue, a better night, two loose stools, pulse towards 120, and feeble, wine not much relished.

Adhibeatur vesicatorium toti capiti.

Habeat haustum cum laudani guttis quindecim.

Intermittatur vinum rubrum.

12th Aug.—Delirium much aggravated towards evening, quietness succeeded the exhibition of the draught, which still continues, irregular convulsive motions abated, pulse about 120, and firmer.

Habeat misturæ diaphoreticæ salinæ unciam, tertia quaque hora.

Repetatur haustus, vespere.

13th.—A tolerable night, disposed to be drowsy; on awaking, he appears agitated, screaming occasionally, but makes no complaint, appetite indifferent, pulse quick, and feeble, belly slow, involuntary motions not perceived, face more or less flushed, copious discharge by the blister.

Habeat quam primum infusi sennæ uncias duas, necnon ejusdem infusi unciam semel indies.

Pilulam è mercurio cinereo, mane et vespere.

Intermittatur haustus anodynus.

14th.—An indifferent night, although less drowsy has on the whole slept much, tongue clean and moist, skin cool and soft, pulse about 100, and feeble, expression of countenance more natural, one stool, but little food taken.

Continuentur pilula hydrargyri et mistura.

17th.—Appetite mending, looks improving, sleep natural, pulse calm, skin cool, belly open.

Intermittatur pilula hydrargyri.

An egg to dinner.

27th.—Dismissed cured.

Royal Infirmary, 27th March, 1804.

DONALD STEWART, Ætatis 19.—Complains of violent headach, vertigo, nausea, and occasional vomiting, pain under the sternum, with frequent short cough, and slight dyspnœa, debility, general uneasiness, pulse 90, skin hot, tongue loaded, belly, by account, regular. Was attacked two days ago, with rigors, has used no remedies.

28th March.—Imponatur vesicatorium quam primum sterno, et sumat bolum jalapæ compositum.
Misturæ salinæ ammoniatæ unciam, subinde.

29th.—Headach and sickness, cough, and pain of breast relieved, frequent stools, pulse calm, skin cool and moist, tongue white, thirst inconsiderable, an indifferent night, blister has answered well.

Habeat haustum anodynum, vespere.
Continuetur mistura salina ammoniata.

31st.—Purging gone, cough returns at times, with uneasy breathing, pulse 90, and feeble.

R. Misturæ mucilaginosæ uncias quatuor,
Vini c tartrite antimonii drachmas duas,
Tincturæ thebaicæ guttas triginta.
Misturæ agitatae sumat unciam dimidiam, subinde.
Intermittatur mistura salina ammoniata.

3d April.—Belly having been slow, a laxative was given last evening, as yet without effect. Face at times is flushed, and he is somewhat delirious, cough is however abated, breathing easy, pulse calm.

Habeat quam primum, infusi sennæ uncias tres.
Continuetur mistura tartritis antimonii.

4th April.—No stool till he got an injection, two since, pulse 80, tongue foul, but moist, eyes suffused.

Continuetur mistura è tartrite antimonii.

5th.—Headach and delirium gone, a good night, complains of pain of throat, with difficult deglutition, pulse 80, skin hot, belly slow.

Adhibeatur oleum ammoniatum cum panno laneo faucibus externis.

Habeat pulveris jalapæ compositi scrupulos duos.

7th.—Pain of throat gone, a good night, passage of belly, pulse 80, skin cool.

13th—Convalescent.

Intermittantur, medicamenta.

Full diet.

17th—Four loose stools.

Potionis cretaceæ unciam unam, secunda quaque hora ;
pilulam thebaicam, bis de die.

18th.—Four stools.

Habeat sodæ tartarisatæ drachmas sex.

Continuentur potio cretacea et pilulæ thebaicæ.

20th—Purging gone, tongue appears loaded, headach, pulse calm.

Habeat infusi amari unciam dimidiam, quater in dies.

Intermittantur potio cretacea, et pilulæ thebaicæ.

21st.—Stools have become frequent, and of a natural appearance, with gripes, and occasionally sickness, and spontaneous vomiting, tongue white, thirsty.

Habeat ipecacuanhæ scrupulam unum, pro emetico.
Continuetur infusum amarum.

22d April.—Stomach appears to have been loaded, gripes relieved.

23d.—General uneasiness and pain, tendency to delirium, eyes are suffused, pulse feeble, indifferent nights.

R. Vini rubri uncias quatuor,
Aquæ uncias quatuor. Misce.
Sumat unciam dimidiam, subinde; haustum anodynum, vespere.

24th.—Restless, and more delirious, without particular complaint. Eyes less suffused, but heavy, tongue somewhat loaded, pulse at the wrist hardly felt, a natural stool in the evening, wine relished, and some food taken.

Habeat vini rubri uncias duodecim,
Aquæ uncias octo. Sit mistura, ut heri porrigenda.

25th.—Has had a quieter night, but continues indistinct, with feeble pulse, parched tongue, and involuntary twitching, no stool.

Habeat quam primum bolum è jalapa cum mercurio, et vespere, si opus sit, ad alvum dejiciendam, enema domesticum.
Continuetur vinum.

26th.—A quiet night, disposed to sleep since morning, countenance more florid, and of a more natural appearance, a copious, dark-coloured, and fetid stool, after the injection.

Repetatur bolus è jalapa, cum mercurio, et enema domesticum, si opus sit.
Repetatur etiam vinum.

27th April.—One stool by the injection, and another an hour after, continues to sleep much, pulse 120, still feeble.

Repetatur enema vespere.

Continuetur vinum.

28th.—Continues drowsy and indistinct, with tremor of hand, and slight subsultus tendinum, tongue loaded, pulse feeble, wine relished.

Imponatur vesicatorium capillitio abraso.

Repetatur bolus à jalapa cum mercurio ut supra, necnon enema domesticum, si opus sit, vespere. Repetatur vinum.

29th.—A fetid and rather scanty stool after the injection. A good discharge by the blister, appears less drowsy, has been more distinct, tremor and subsultus at present gone, tongue dry and less loaded, pulse feeble, wine still relished, and little food taken.

Repetatur bolus à jalapa cum mercurio, necnon enema. Continuetur vinum.

30th.—A copious, but still fetid and dark-coloured stool, from the injection. Has passed an easy night, wine still relished, and a little more food taken, slight subsultus, with appearance of floccitatio. In other respects as yesterday, pulse feeble.

Repetatur bolus à jalapa cum mercurio, necnon enema si opus sit, et continuetur vinum.

1st May.—Two stools after the injection, the last copious, dark and fetid, a quiet night, tremors and floccitatio abated, pulse 80, and of good strength.

Repetatur vinum.

2d.—A good night, with less delirium, tremor and floccitatio gone, pulse 80.

Repetatur vinum.

3d May.—Febrile symptoms continue to abate, free of complaint, pulse calm, belly rather slow.

Habeat pulveris jalapæ compositi scrupulos duos.
Vespere enema domesticum, ni prius soluta sit alvus.
Continuetur vinum.

6th.—Two stools in the course of yesterday, continues apparently convalescent, but is greatly emaciated, tongue clean, pulse calm, improving appetite.

Habeat vini rubri uncias octo.
Aquæ uncias quatuor.

30th.—Intermittatur vinum.

Full diet.

15th June.—Dismissed cured.

Royal Infirmary, 7th Oct. 1805.

MARGARET MANSON, Ætatis 20.—Complains of headach, vertigo, nausea, and occasional vomiting; pain of back, and general pains; pulse 180 and weak, skin hot, tongue very foul, belly costive; complaints of two days duration, for which she knows of no cause.

Habeat bolus jalapæ compositum cras mane.

8th Oct.—Two full stools of natural appearance; headach continues; two or three attacks of vomiting during the night, none since morning; sickness relieved, tongue still much loaded.

Repetatur bolus jalapæ compositus vespere.

9th Oct.—Headach is relieved, no return of vomiting, sickness abated, tongue less loaded, surface of natural heat, pulse 100 and soft, three copious stools.

Decoctum furfuris ad libitum.

10th.—Pulse calm, skin cool, tongue clean, makes no complaint, good night, with returning appetite.

15th.—Convalescent.

Full diet.

18th.—Dismissed cured.

Royal Infirmary, 6th Nov. 1805.

MARGARET KENNEDY, *Ætatis* 17.—Complains of severe headach, vertigo, and nausea, with pain in the small of her back and general uneasiness; pulse 100, and feeble, skin cool, tongue furred, belly slow, says she has been subject to flying pains for some weeks, but they have been aggravated for two days with headach and other symptoms of general fever.

Habeat bolum jalapæ compositum cras mane.

7th Nov.—Pain of loins, and other symptoms of general fever as described; alternate attacks of chilly and warm fits, followed by sweating; by her account headach has morning remissions; pulse about 100 and feeble; as yet no stool.

Habeat quam primum,
Infusi sennæ,
Infusi lini utriusque uncias tres.

8th Nov.—Pain of loins and headach continue, with nausea, and one attack of spontaneous vomiting; complains still of alternate rigors and hot fits; pulse about 100, and feeble, skin cool, tongue moist, little thirst, full alvine evacuation, of a dark colour and fetid smell, a quiet night.

Decoctum furfuris ad libitum.

Cras primo mane,

Pulveris jalapæ compositi drachmam.

9th.—Copious and natural stool in the course of yesterday, appetite good, easy night.

11th.—Dismissed cured.

Royal Infirmary, 6th June 1806.

JEAN WYLLIE, Ætatis 25.—Complains of severe headach, nausea, and vomiting, pain of back and loins, and general pains. Surface rather warm, tongue foul, belly slow, face flushed, pulse 110, and sharp.

Complaints are of four days duration; has had one small dose of the supertartrite of potass, which scarcely moved her bowels.

Cras primo mane, habeat

Bolum jalapæ compositum.

7th June.—Headach and sickness are relieved, surface of natural heat, countenance less flushed, tongue clean,

pulse about 80 and soft, an indifferent night, but disposed to sleep since morning, two copious and natural stools.

Habeat misturæ diaphoreticæ salinæ unciam, alternis horis.
Decoctum furfuris ad libitum.

9th June.—Convalescent.

Intermittantur medicamenta.

12th.—Dismissed cured.

Royal Infirmary, 24th June, 1806.

WILLIAM MACKAY, *Ætatis* 36.—Complains of headach, vertigo, and slight nausea, pain of breast, with general pains. Pulse about 100 and soft, tongue white, belly slow, appetite bad, prostration of strength.

Complaints are of three days duration; he can assign no cause for them. Had an emetic last night, which he thinks gave him great relief.

Sumat bolum jalapæ compositum.

25th June.—Vertigo, headach, and other febrile symptoms much declined, skin cool, pulse calm, tongue clean, one easy alvine evacuation.

28th.—Free of complaint.

Dismissed cured.

Royal Infirmary, 1st July, 1806.

MARY STALKER, *Ætatis* 18 —Complains of head-ach, debility, general soreness and uneasiness, with vertigo, when in the erect posture, alternation of heat and cold, great thirst, sleep disturbed, pulse 108, belly and catamema natural.

These complaints began on the 29th ultimo, with rigors, headach, and prostration of strength, and are attributed to cold.

Sumat hora somni haustum cum tincturæ thebaicæ guttis triginta, et cras primo mane, bolum jalapæ compositum.

2d July.—Headach, vertigo, and lassitude continue, a bad night, with much heat of surface, which is now however moderately cool and rather moist, tongue clean, pulse about 90 and soft, two scanty alvine evacuations, scybalous, but of natural colour.

Habeat quam primum infusi sennæ uncias tres, infusi lini uncias quinque.

Decoctum furfuris ad libitum.

3d.—Vertigo, headach, and sense of lassitude are relieved, skin cool, tongue clean. Plentiful alvine evacuation, with gripes; the latter feces fluid, of a dark, somewhat bloody colour, an indifferent night.

Habeat incunte nocte, haustum cum laudani guttis triginta.

5th.—Belly has been regular, complaints are gone.

Dismissed cured.

Royal Infirmary, 7th September 1806.

ANN HENDERSON, Ætatis 18.—Complains of headach, vertigo, nausea, and vomiting, general pains, with severe pain of breast, greatly impeding respiration. Pulse about 100 and soft, tongue white, belly slow, skin rather hot, thirsty, appetite bad, sleeps ill.

Her complaints are of eight days duration. She was blooded two days ago, and had a blister applied to her breast, but without relief.

Habeat bolum jalapæ compositum cras mane.

8th Sept.—Headach, vertigo, nausea, and retching, continue, pain of breast is relieved. Pulse about 100 and feeble, skin moderately cool. Bolus given as yet without effect.

Accipiat enema anodynum cum tincturæ opii guttis sexaginta.

Habeat pilulas aloeticas octodecim, sumat tres omni trihorio.

9th.—Headach, sickness, and retching gone, skin cool, pulse calm, tongue clean. Pills having been taken, some additional ones have been followed by full alvine evacuations.

Intermittantur pilulæ aloeticæ.

13th.—Has continued convalescent.

Dismissed cured.

SECT. II.

SENTIMENTS OF AUTHORS ON THE USE OF PURGATIVE
MEDICINES IN FEVER.

LOMMIUS *de Curandis Febris, continuis edit.*

Lond. 1718.

Pp. 131, 132, 133, 134. “ Atque hæc quidem purgandi tempora certa sunt, nisi materia protinus turgere cœperit, id est, effervescere, ac de loco in locum mobilis rapi. Tum enim quam primum humor, quamvis nondum coctus, auctore Hippocrate aufertur purgatione debet; idque, ne vel in partem delatus principem, lethalem ibi excitet inflammationem, vel repente, si venenatus est, naturæ calorem opprimens, occidat. Illud quoque scire licet, interdum, et declinante febre, iteram purgationem posse, cum per imperfectam judicationem natura majorem quidem materiæ partem exclusit, reliquam vero excludere potis non fuit, quæ ipsa jam tum, (ne post iterum morbum faciat) recte medicamento ducitur. Nam quæ post judicationes (ut diligenter observat Hippocrates) relinquuntur in morbis, recidivas facere consueverunt. Adto vero denique inconsulta complurium judicia medicorum, ex quibus cum multi, incipiente morbo, purgent, haud pauci etiam consistente, nonnulli quoque declinante, paucissimi tamen sint, qui incrementi provectionem partem arripiant. Quasi, certe, data opera, id tempus præterierunt, quod ad hanc curationem in acutis febribus est aptissimum.

“ Porro non loquor hactenus id medicamenti genus, quod passim lenitivum appellant, sine vi, ullave corporis turba sordes intestinorum expurgans.” “ Haud leve com-

modum acute febricitantibus ex hujusmodi accedit alvi ductionibus. Nam siccum oletum vacuatur, putredine offendens sua, ardor febrilis mitescit, corruptæque bilis colluvies, quæ juxta est, eluitur. Verum initia plane hæc esse debent, sic ut alvum semel, aut, ad summum bis, non amplius, si fieri potest, moveant.”

GLASS (THOMAS).—*Commentarii 12 de Febris ad Hippocratis disciplinam adcommodati.* Lond. 1742.

Pp. 102, 103. “Materia ergo turgens est aliquid molestum circa primas vias hærens, quod aut per os, aut per alvum, plerumque excuti potest; atque haud raro ventriculum aut intestinum ad id ipsum expellendum irritat.”

Pp. 103, 104. “Infra autem præcordia turgere materiam, et inte tuis insidere, significant; genuum gravitas, lumborum dolor ventris distentiones, murmura, tormina, alvi egestionem liquidam, sinceram, corruptam, et acres. Cæterum hæc mala accidentia, necnon febres ab eadem causa concitata, non prius ulla arte cessant, quam materia turgens contemperata sit, vel commoda purgatione expulsa.

“Neutiquam vero expectare æquum est, ut ex his evacuationibus febres, quæ crudæ sunt, judicentur; sed spes est ut gravia illa accidentia, quæ materiam turgentem indicant, leventur; ex quo ægri facilius ferent febres, et illæ citius finientur.”

LANGRISH (BROWNE).—*The Modern Theory and Practice of Physic.* Lond, 1764.

P. 343, par. 589. “ *Purges also are detrimental in the beginning and increase of slow fevers: for daily experience sufficiently informs us, that whenever there is a general relaxation or flaccidity of the solids, a poverty of the fluids, and a languor upon the spirits, the gentlest purging medicine creates great uneasiness; and, indeed, if any excretion be considerably enforced, some inconvenience or other will be sure to succeed it, at such times, especially, where there is no morbid matter fit for expulsion, nor no critical discharge to be made from the blood.*”

P. 344, par. 591. “ *As purging has been proved to be injurious in the beginning and increment of this disease, we need not, therefore, be solicitous about stools, unless the patient happens to be more than ordinary costive; and then the most lenient clysters that can be contrived may be sufficient.*”

Pp. 346--347, par. 596. “ *But if there be a peculiar idiosyncrasy in the patient, or if the morbid febrile matter be so tough, viscous, or obstinate, as not to give way to the efforts of nature, assisted by the above-mentioned medicines, in some reasonable time, the symptoms will necessarily increase and grow worse, and then we have scarce any chance left for the recovery of our patient, but by the use of moderate purging medicines: for since the natural excretions by perspiration, sweat, urine, &c. are diminished, or at least they are not sufficient to excrete the morbid*

matter, this evacuation seems to bid the fairest at this time of day. For though all the bad symptoms proceed from weak and relaxed nerves, yet if the febrile matter be fitted for excretion, and the biliary and the renal ducts deny it a passage, however assisted by our art, the retained matter will inevitably grow putrid, the vital vigour will decay, and death will most certainly ensue, unless the body be timely relieved by some few loose stools."

Par. 597. "Experience assures us, that *gentle lenient cathartics*, rightly ordered, where the morbid matter is properly attenuated, diluted, and divided fit for expulsion, are not only safe, but necessary; and the whole system of nerves, instead of being weakened, will gain strength thereby; so that when these fevers have continued for a long time, and there has been no perfect crisis, they will hardly admit of any other cure than what is carried on by gentle cathartics."

Dr CULLEN's First Lines of the Practice of Physic.
Edin. 1789.

Vol. I. p. 201. par. 149. "If, notwithstanding these doubts, (146, 147, 148,) it shall be asserted, that purging, even from the exhibition of purgatives, has often been useful in fevers, I would beg to maintain, that this has not happened from a large evacuation, and therefore, not by moderating the violence of reaction, excepting in the case of a more purely inflammatory fever, or of exanthemata of an inflammatory nature. In other cases of fever, I have seen a large evacuation by purging of mischievous consequence; and if, upon occasion, a more moderate evacuation has appeared to be useful, it is apprehended to have been only by

taking off the irritation of retained feces, or by evacuating corrupted humours which happened to be present in the intestines; for both of which purposes, frequent laxatives may be properly employed."

HUXHAM (JOHN).—An Essay on Fever, 6th edition.

CHAP. 8.—*Of putrid, malignant petechial fevers.*

Pp. 111, 112. "Not only the stomach, but the whole intestinal canal, should be unloaded in the beginning of these fevers, but I am sure, reason and experience shew the necessity of doing it by very gentle methods."—"The above soft easy emetics and eccoprotics have this further advantage, that they may be repeated, and given from time to time, as the putrid bilious colluvies drains into the first passages. By such means I never feared to puke, or promote a stool or two, when indicated at any time of the fever, by a nauseous bitter taste in the mouth, sickness at stomach, *nidorose* and fetid *eructations*; or by too great costiveness, tumid abdomen, borborygmi, griping pains, &c."

Pp. 113, 114. "Where, therefore, there are signs of its," the bile, "being redundant, it should forthwith be discharged by vomit, or stool, as nature points out. I have many times, with the greatest pleasure, in these putrid fevers, seen an amazing change for the better immediately succeed a fit of vomiting, and a stool or two, where an inexpressible anxiety, load on the *præcordia*, perpetual sickness, *eructation* and *singultus* had preceded. The extreme foulness of the tongue, sickness and load at stomach, with

a loathsome bitter taste, and horrible offensive stinking breath and eructations, shew the condition of the stomach; and the abominably fetid, black, bilious stools, the necessity and advantage of that discharge. Surely if a poison of any kind was lodged in the stomach, or bowels, we should not hesitate about the necessity of carrying it off as soon as possible, and truly putrid bile is little less pernicious than an actual poison."

Dr Huxham, declining the use of strong purgatives in this fever, says, p. 115. "Nature, indeed, without such powerful stimulants, too frequently overacts her part, and runs into a profuse diarrhœa, a dysentery, soon fatal if not restrained; but this most commonly happens, from suffering the corrupt bilious matter to lodge and putrify too long a time in the bowels; and the best way to prevent it, is to dislodge it at proper seasons, and due intervals."

CURRIE (JAMES).—Medical Reports on the Effects of Water, cold and warm, as a Remedy in Fever, and other Diseases. Lond. 1805.

Vol. I. p. 256. "What then ought to be the indications of practice in fever? To diminish the cold in the cold stage; to moderate the heat in the hot stage, and to resolve the stricture on the extreme vessels, by which the morbid heat is retained, and the reaction prolonged; and where the inordinate action of the vascular system continues after these objects have been attained, to support the powers of life, till the morbid associations, or habits of action, gradually die away, from the removal of the causes by which they were introduced. In addition to these general indications,

it will be essential to secure the proper action of the bowels, and, in every case, to unload the alimentary canal of its morbid contents, whether these contents have become diseased through the action of general fever; or, as there is reason to believe, in some of the fevers of the warm climates, be the remote cause by which fever is produced."

SECT. III.

NARRATIVE OF THE PLAGUE IN EGYPT, 1801; IN A
LETTER ADDRESSED TO THE AUTHOR, FROM JOHN
PRICE, ESQ. DEPUTY PURVEYOR OF THE FORCES.

“ SIR, *Edinburgh, 15th March, 1807.*

“ Having, previous to my residence here, become acquainted with your excellent work on Purgative Medicines, I resolved, whenever I should have a proper opportunity, to present to you some observations, made by myself, on the use of purgatives in certain disorders, in which it had not been usual, in the countries in which I practised, to employ such remedies to any extent.

“ I have now the honour of being personally known to you, and can therefore, with the greater confidence, submit a few of my observations to your perusal. Should you deem my testimony, in favour of a practice so successfully instituted, and so well detailed by yourself, worthy of the attention of the public, you are at liberty to avail yourself of it, in any future edition of your work.

“ The diseases in which I have employed the remedies alluded to, were the remittent and intermittent fevers of certain countries in the Mediterranean and Archipelago, and in the plague in Egypt.

“ In the fevers of those countries I was first led to employ purgatives very freely, particularly mercurial purgatives, in consequence of having observed, upon opening the bodies of several who died of those disorders, that the intes-

tinal canal was filled with indurated feces. In most of these cases, the vomiting of bile, the tension of the abdomen, and the torpor of the bowels had been remarkable. I have often exhibited the bark without the least success in a remittent or intermittent, which has ultimately yielded to repeated purges of calomel and rhubarb.

“ The various quality and great quantity of feculent matter discharged, and the subsequent relief of the most distressing symptoms, gave me confidence in a practice, which neither the authorities then in my possession, nor the usages of the practitioners of those climates, would have sanctioned. But as it may be most interesting to you, to be informed of the success of those remedies in the treatment of the plague, I shall confine myself to the statement of a few facts relative to that disease only.

“ It may perhaps be satisfactory to you, that I should mention what opportunities I may have had of observing this disease, lest the public should treat as a fiction observations, which were, at great personal risk to myself, actually made, and faithfully recorded.

“ In the year 1801 I was placed on the staff of the Egyptian army by Sir Ralph Abercromby, and went to Egypt soon after that great General had completed his brilliant career by the conquest of that country. In the autumn of that year, the plague having appeared in the Indian army under the command of General Baird, I offered my services to him, which he accepted, and gave me the charge of the plague hospital. At the beginning of the next year, I was attacked with the disorder. On my recovery I was appointed chief regulator of the Lazaretto at Alexandria. The disease attacked me again in the spring, when I was suc-

ceeded in my office by my excellent friend Dr Buchan, physician to the forces, who had been in the charge of the plague hospitals of the British army during the preceding summer. On my recovery a second time, I continued to do duty with Dr Buchan, whose two assistants had fallen victims to the disease. Doctor Buchan falling sick towards the latter end of the season, I again had the charge of the Lazaretto, in which I continued, till the disappearance of the disease liberated me from a confinement and exposure to the contagion for the space of nine months.

“ In the subsequent observations, I make no allusion to the practice employed whilst I was serving with Dr Buchan, as it would be unpardonable in me, to appropriate to myself any portion of the merit of a man, whose constancy in the most perilous of situations I often had occasion to admire, and to whose kind offices I entirely owed my recovery.

“ I cannot precisely state what proportion of my patients recovered; but that a far greater number recovered than has hitherto been known in this disease, I think I could ascertain, by a reference to two of my very respectable friends, now resident in this city, Thomas Young, Esq. who was Inspector-General of hospitals in Egypt in 1801, and Dr Shapter, Inspector, who was at the head of the medical department, from the departure of Mr Young for Europe, till the British army left that country.”

THE PLAGUE.

“ At the commencement of the disease, I observed, in many patients, particularly the native Indian troops, a remarkable affection of the sensorium. Some were brought

to me in a state of wild delirium, their eyes swollen and glistening, the vessels of the adnata turgid, and of various colours, some being red, others yellow, others of a dusky hue. The disposition of the vessels was as various as their colour. In some cases, there was a plexus running from each canthus towards the cornea; in others, the vessels ran distinctly in every direction.

“ In most patients, there was a remarkable tremor of the hands, and agitation of the countenance.

“ Some raved much, foamed at the mouth, and expired immediately upon their admission into the hospital.

“ Some appeared to be in a state of stupor; and, if made to walk towards their beds, staggered as if drunk. Patients of this description soon became comatose, or fell into a low delirium.

“ In the worst cases the skin was exceedingly hot, dry and rough to the touch; the pulse very rapid and unequal, from 140 to 160; the pulsation of the carotids remarkably strong; the respiration quick, with a sense of tightness or oppression in the chest. In some cases, the heat of the skin, and frequency of pulse were not greater than natural; the tongue, from the commencement, frequently covered with a white fur resembling powdered chalk, the edges mostly of a deep red colour, the whole tongue frequently swollen, and the vessels underneath very turgid, and of a dark colour. In some, the tongue was marked with alternate streaks of white and deep red. In the course of the disease, it sometimes became dry, brown, and cleft in the middle.

“ In the worst cases, the thirst was inextinguishable. Such patients complained of a burning heat, and great pain in the stomach. In some the stomach was exceedingly irritable.

“ In almost every case an obstinate constipation preceded and accompanied the disease, and distressed those who recovered during the state of convalescence. In many of the native Indians, there was a considerable tumor in the epigastrie and right hypochondriac regions, and a sense of pain was expressed upon the slightest pressure. In some the whole abdomen was swelled in an irregular manner. In others it had an emphysematous appearance. The urine in the worst cases was of a dark red colour.

“ In all the cases that came under my inspection, there were buboes in the groins, axillæ, or parotids. In a few I observed carbuncles, petechiæ of a deep purple colour, and extensive livid streaks and blotches.

“ The sensations principally complained of by patients were, giddiness, violent pain in the head, extending from one temple to the other, weight in the head, with great drowsiness, fright, and horror, with confused vision, pain in the stomach, and distention in the belly.

“ A furious delirium, or deep coma, were in general fatal symptoms. The disease was characterized by the buboes, accompanied by a dull pain in the head, great debility, tremor of the hands, and torpid state of the bowels.

“ When the fever was well marked, it was very various in its type, sometimes assuming the continued, at other times the remittent, or even intermittent form.

“ Between the months of November and January, my hospital was encamped in a sandy desert near Rosetta, not far from the banks of the Nile. After sunset, I instantly observed a vapour arise from the sand, which produced in myself the sense of chilliness. There were frequently heavy showers of rain in the night, and violent gusts of wind from between the sand hills, which often blew down my encampment. My patients were mostly native Indians. In them the fever assumed the form of a quotidian; the accession was generally at sunset, the rigors and oppression of the chest were very remarkable, and often continued till midnight.

“ The hot stage was very violent, the pain of the head, the thirst and heat were intense. There was generally a remission in the morning. In some Europeans, at the same season, and in the same situation, the fever did not show any distinct remissions. The Indians died generally in the cold fit.

“ In the early part of the ensuing year, 1802, I was stationed at the Lazaretto of Alexandria. It was situated near the sea; there was a vast quantity of sea weed on the shore, which emitted an offensive smell. Here I saw the fever assume the remittent type in some cases, one with three or four remissions in the day, the exacerbation being marked by considerable rigors, oppression at the chest, and a remarkable sense of cold in the head.

“ In treating the disease, the remedy I principally relied on was mercury, given internally, so as to procure a complete evacuation of the bowels, and an affection of the mouth. With the latter intention, I used mercurial friction, but was never able to produce the least effect upon the sys-

tem through the medium of the skin. As the affecting of the mouth by mercury was frequently a remote, and always an uncertain effect, and as I am inclined to believe that the good effects of that remedy were fairly referable to its operation as a cathartic, I shall proceed to treat of it as such, though, at the same time, I must not suppress this fact, that no one of my patients died whose mouth was affected by mercury, yet many recovered who never experienced any such affection ; among others, I may mention myself.

“ In violent spontaneous vomitings of bile, and a viscid glairy matter, which could not be restrained by opium, calomel was successfully exhibited ; as soon as the bowels were opened this symptom disappeared.

“ When the affection of the head, the tension and tumour of the abdomen, the pain of the stomach were considerable, six grains of calomel, and as many of jalap, were given every two or three hours, till a full evacuation was procured, the patients being allowed to drink as much lemon juice and water as they wished. This being a grateful drink, was generally taken in large quantities, and that without producing any unpleasant effects, either in the stomach or bowels. I have exhibited sixty grains of calomel and jalap, in the space of twelve hours, without producing more than three evacuations by stool, accompanied by a vast quantity of high-coloured urine. In most cases there was voided a great quantity of indurated feces, of a dark colour, the matter apparently of the consistence and colour of chocolate ; lastly, pure bile, with a glairy matter like the whites of eggs. Matter of the last description I have often seen voided without any admixture of bilious or feculent matter. I have frequently observed worms and putrid substances of a most offensive smell. When a full evacu-

ation was effected, the fever abated, and the head was considerably relieved.

“ In some cases I observed the fever to terminate upon the evacuation taking place, there being no evidence of the recurrence of the paroxysms, although in seasons when the fever accompanying the eruptions assumed the remittent or intermittent type. It is to be remarked, that notwithstanding the fever was frequently terminated in this way, yet there was a tendency to constipation, during the state of convalescence, accompanied with violent spasms of the stomach. To remove the latter symptoms, opium, æther, volatile alkali, &c. were administered unsuccessfully, yet they always yielded to a purgative. The remedies I generally employed were aloes and rhubarb.

“ During the operation of the mercurial purgatives, I have observed the tumours to subside in a considerable degree, but they returned soon after to their former dimensions, and came to suppuration. This process was frequently aided by the administration of bark, and a moderate quantity of wine. A nourishing diet too was allowed, but in small quantity.

“ The patients were frequently washed all over with warm vinegar and water, and the bed-clothes and tents were sprinkled with vinegar.”

(Signed,) JOHN PRICE,
Deputy Purveyor of the Forces.

APPENDIX III.

SCARLATINA.

SECT. I.

CASES OF PATIENTS WHO LABOURED UNDER SCARLATINA, EXTRACTED FROM THE RECORDS OF THE ROYAL INFIRMARY.

Royal Infirmary, 17th Nov. 1804.

JAMES RITCHIE, soldier, *Ætatis* 19.—Feels great pain and difficulty of deglutition, the internal fauces being of a deep red colour, and the tonsil considerably swelled, with a large greyish-coloured slough, occupying the left one : complains of headach, general oppression, and debility. Appetite is bad, pulse 100, skin very hot, tongue very dry, thirsty, belly slow. He was attacked with these symptoms four days ago, and can assign no cause for his complaints.

Has used no remedies.

Habeat bolum e jalapa cum mercurio.

R. Acidi muriatici oxygenati drachmas duas.

Aquæ fontanæ uncias sedecim. Sit mistura in loco tenebroso servanda, cujus sumat unciam unam e cyatho vitreo, secunda quaque hora.

18th Nov.—Headach, sickness, and oppression, are relieved, tongue less parched, surface less pungently hot, pulse about 100, rather feeble, state of internal fauces as described, with difficult deglutition, countenance pale, no stool.

R. Tincturæ jalapæ drachmas sex,
Aquæ canellæ albæ drachmas duas,
Sacchari drachmam unam.
Sit haustus quam primum sumendus.
Oleum ammoniatum cum panno lanco faucibus externis.
Continuetur acidum muriaticum oxygenatum.

20th.—One easy stool, skin cool, pulse calm, countenance less pale, deglutition more free.

Repetatur haustus e tinctura jalapæ.
Continuetur acidum muriaticum oxygenatum.

24th.—Affection of internal fauces, and febrile symptoms gone, appetite improves.

25th.—Tongue clean, belly regular.
Intermittatur acidum muriaticum oxygenatum.

29th.—Continues feeble, countenance pale, and expressive of languor.

Habeat misturæ corticis cinchonæ aromaticæ unciam unam, tertia quaque hora.

Full diet.

3d Dec.—Since yesterday, considerable œdema has occurred. By account, urine has been in natural quantity, and bowels regular, pulse about 70.

Habeat quam primum bolum e jalapa cum mercurio, vespere repetendum; necnon cras primo mane, ni prius soluta fuerit alvus.

Intermittatur mistura cinchonæ.

4th Dec.—Three stools; the last of natural appearance, œdema abated.

Two boluses taken.

Cras mane repetatur bolus e jalapa cum mercurio.

No stool.

5th.—R. Sodæ tartarisatæ unciam unam,
Infusi sennæ uncias duas,
Decocti furfuris libram unam.
Sit solutio partitis vicibus sumenda.

6th.—Five watery stools, œdema continues, rather aggravated, with considerable dyspnœa, particularly during last night, pulse 60, and soft.

R. Submuriatis hydrargyri grana duodecim,
Pulveris jalapæ drachmam dimidiam,
Simul terantur et dividantur in doses quatuor æquales.
Sumat unam omni trihorio.

7th.—Has had plentiful alvine discharge, of natural appearance, urine is also natural and abundant, œdema seems abated, and dyspnœa relieved, the powders taken, mouth not affected.

Repetantur pulveres, ut heri præscriptum, cras mane.

8th.—Has had two stools, rather scanty, dyspnœa still farther relieved, one powder only taken.

Continuentur pulveres, unus omni trihorio sumendus.

R. Sodæ tartarisatæ drachmas sex,
Infusi sennæ uncias duas,
Aquæ fontanæ libram.
Sit mistura tribus vicibus sumenda, cras mane.

9th Dec.—Three powders taken, four stools, but the alvine discharge on the whole scanty, of a green colour, and fetid, urine scanty, of a dark and almost bloody colour, œdema continues, breathing easy, mouth is affected.

Repetatur solutio sodæ tartarisatæ ut heri præscriptum, quam primum; cras mane iterum repetenda.

10th.—Sickness and vomiting after the last dose of solution this morning, alvine discharge more abundant and natural, urine also in greater quantity, and more natural, œdema abated.

Juris bovini libram unam, indies.

Bason of tea to breakfast.

11th.—œdema still more abated, feculent discharge, of natural quantity and appearance.

Habeat pilulas aloeticas duas, omni mane et vespere.
Vini rubri uncias octo, indies.

13th.—Belly regular, œdema gone, and countenance more lively than hitherto.

Continuentur vinum et pilulæ aloeticæ.

16th.—Has had two stools daily, in abundant quantity, and of natural appearance.

Sumat pilulas aloeticas duas tantum indies.

24th.—Dismissed cured.

Royal Infirmary, 11th Feb. 1805.

WILLIAM GORDON, *Ætatis 22.*—Complains of pain of throat, with some difficulty of deglutition, the internal fauces are of a deep red colour, general redness of surface, frequent scanty stools, with tenesmus, loss of appetite, pulse 98, tongue loaded, thirsty, skin warm.

Was attacked three days ago with general pains. The efflorescence appeared yesterday,

Has used no remedies.

Habeat tartritis sodæ et potassæ drachmas sex,
Infusi sennæ uncias duas,
Ex infusi lini unciis sex, duabus vicibus sumendas.

12th Feb.—Has had several stools, efflorescence faded, internal fauces relieved, pulse calm, tongue loaded, much thirst and languor.

Vespere habeat haustum anodynum.
Cras mane solutionem catharticam, ut heri præscriptum,
Decoctum surfuris tepidum, ad libitum.

13th.—Tongue cleaner, febrile symptoms and eruption gone, a good night, is less languid, pulse calm, four stools.

Vespere repetatur haustus anodynus.

14th.—A quiet night, two stools of natural appearance, free of complaint.

Repetatur haustus anodynus.
Habeat omni mane pulveris radicis rhei grana octo.

15th Feb.—One stool. Convalescent.

Repetatur haustus anodynus.

17th.—Belly regular, stools natural.

Full diet.

23d.—Belly open, tongue loaded.

Habeat ipecacuanhæ scrupulum unum, vespere.

Haustum anodynum, hora somni.

24th.—No vomiting, tongue clean, purging gone.

28th.—Dismissed cured.

Royal Infirmary, 6th Jan. 1805.

ALEXANDER CORNER, *Ætatis* 7.—Complains of almost constant headach, and occasional vertigo, pain of abdomen, with some tension and swelling, the pupils appear dilated, disturbed sleep, from which he sometimes awakes with a loud scream, loss of appetite, feebleness, pulse 90, skin rather hot, tongue moist, thirsty, belly costive, he has a slight excoriation on each haunch, from lying on them long.

The above symptoms have been present three weeks, and succeeded a fever, which was accompanied with general efflorescence of surface, and sore throat, followed by desquamation of the cuticle: during the fever he took an emetic.

Two days ago he took a dose of senna and manna, but with little effect.

Habeat pulveris jalapæ grana sex.
Submuriatis hydragryi grana tria.
Sit bolus quam primum sumendus.

7th Jan.—As yet no stool.

Inficiantur quam primum per anum, enematis domestici
unciæ octo.

Habeat bolos quatuor, ut heri præscriptum; sumat unum
omni trihorio.

8th.—Three stools, dark and fetid, and in considerable quantity; the first, after the injection; the second, after the third bolus; the third, this morning, the fourth bolus being previously given; has passed a bad night, awaking suddenly, screaming, from short sleeps, but complains less of headach, and more of pain of abdomen; pupils seem to possess more contractility, appetite indifferent, pulse 80, and soft.

9th.—An easier night, sleep being of longer continuance; he awakes less suddenly, and without screaming; by his account, is free of headach, but complains of pain of abdomen; countenance at present pale, pulse towards 100, and feeble, a fetid, fluid, and dark-coloured stool, urine in small quantity, and high coloured, little food taken.

Habeat pulveris jalapæ compositi scrupulum unum quam primum; cras primo mane repetendum.

A small bason of tea, morning and evening.

10th.—Countenance more florid, and expression more lively, pain of abdomen gone, tongue clean, pulse calm, surface cool, two stools, both abundant, and of more natural appearance and odour, some food taken, and seemingly relished, both powders given, a good night.

Repetatur pulvis, ut heri præscriptum.

11th Jan.—Free and full feculent discharge, and he continues free of complaint.

Habeat secum pulveres jalapæ compositos, ut supra præscriptum, duodecim.

Signa, one to be taken daily.

Dismissed cured.

Royal Infirmary, 14th Jan. 1805.

CATHARINE STEWART, *Ætatis* 18.—Complains of pain of back and of loins, occasional headach, vertigo, with uneasiness and sense of weight at the epigastrium, increased on pressure, and after taking food, pain and weakness of knee-joints, strength is impaired, pulse 84, skin cool, tongue rather white, belly slow, catamenia have not appeared for three months, at which time they were suddenly suppressed by exposure to cold.

Habeat bolum jalapæ compositum.

15th Jan.—One stool, rather scanty, fluid, and of natural appearance, symptoms not relieved.

Habeat pilulas aloeticas octo.

Sumat duas quam primum; et deinde, duas omni trihorio.

Cras mane infusi sennæ uncias duas, ex infusi lini unciis octo.

16th.—Copious feculent discharge, headach, vertigo, and stomachic distress relieved, pain of loins continues, remarks a swelling and fulness of face; about four months

since, laboured under fever, which, by her account, seems to have been scarlatina anginosa; since when she has never fully recovered her usual health.

R. Sulphatis magnesiæ drachmas tres,
Supertartritis potassæ drachmam,
Infusi sennæ unciam,
Infusi lini uncias acto.
Sit solutio omni mane duabus vicibus sumenda.

Full diet.

Jan. 18th.—A copious alvine discharge, of greenish colour, headach continues relieved, pain of loins easier, stomachic distress relieved, fulness of features continues.

Continuetur solutio sulphatis magnesiæ.

20th.—A copious and to appearance a natural stool, pain of loins is relieved, complains still of headach, fulness of features gone, urine abundant, pulse calm.

Continuetur adhuc sulphas magnesiæ.

22d.—Headach and pain of loins are gone, alvine discharge has been regular and full.

R. Sulphatis magnesiæ uncias tres,
Supertartritis potassæ drachmas sex.
Misce, et divide in doses octo æquales.

Signentur; Laxative powders, one to be taken dissolved in water once a-day, or every two days.

Dismissed cured.

Royal Infirmary, 28th Nov. 1806.

JOHN JOHNSTONE, *Ætatis* 12.—Complains of pain of throat, with difficulty of deglutition, the internal fauces are of a deep red colour, and on both tonsils several sloughs, of a greyish colour, are observed; general redness of surface, considerable debility, much thirst, appetite impaired, heat moderate, tongue pretty clean, belly by account regular, pulse 100, face flushed, sleeps pretty well.

The affection of the throat, accompanied with rigors, began on the evening of the 23d current; the efflorescence began to appear in about 48 hours after; has used some remedies with advantage.

Sumat pulveris jalapæ compositi scrupulos duos.
Utatur infuso rosarum pro gargarismate.

29th Nov.—Flushing of countenance, with efflorescence, and moderate heat of surface, and tumefaction and ulceration of internal fauces, with increased pain, continue; pulse about 108, soft, considerable thirst, a quiet night, pretty copious alvine evacuation, consisting of formed detached pieces of hardened feces.

R. Infusi sennæ uncias tres,
Infusi lini uncias sex,
Extracti radicis glycyrrhizæ drachmam unam. Solve.
Sumat uncias tres omni hora.
Continuetur infusum rosarum.

A bason of tea morning and evening.

30th Nov.—A quiet night, surface cool, pulse about 90, soft, efflorescence much faded, flushing of face gone, internal fauces less pained, full alvine evacuation of dark-coloured and fetid feces. Infusion taken.

Sera nocte habeat bolum jalapæ compositum, et cras mane repetatur infusum sennæ, ut heri præscriptum.

1st Dec.—Internal fauces continue easy, pulse calm, tongue clean, surface of natural heat, urine of natural appearance, and in full quantity, two alvine evacuations, feces soft, and of more natural appearance.

Intermittatur infusum rosarum.

2d.—Ulceration of internal fauces healed or healing, in other respects convalescent, urine abundant, passage of belly, feces nearly of natural appearance.

Habeat supertartritis potassæ scrupulum unum ter de die.

4th.—Belly regular and urine abundant.

Continuetur supertartris potassæ.

5th.—No stool since yesterday, urine abundant, surface dry, desquamation of cuticle.

Habeat quam primum pulveris jalapæ compositi scrupulos duos.

Continuetur supertartris potassæ.

6th.—Copious and consistent alvine evacuation, urine continues abundant, improving in strength and appetite.

Continuetur supertartris potassæ.

8th.—Habeat supertartritis potassæ uncias duas.

Signa, a tea-spoonful in water once or twice a-day.

Dismissed cured.

SECT. II.

NARRATIVE OF SCARLATINA, AS IT AFFECTED THE CHILDREN IN GEORGE HERIOT'S HOSPITAL, IN AUTUMN 1804.

GEORGE HERIOT'S Hospital is a large building, of noble architecture, forming a quadrangular court. By this construction, and by means of cross windows in the different apartments, complete ventilation is procured. The house occupies a dry situation, on the highest part of a ridge immediately to the south of the city, and is placed in the middle of an inclosure, consisting of several acres. On the south and west, it commands extensive views of the country : it is more confined on the north and east, by the castle, and by the buildings in the Old Town, from both of which, however, it is at a considerable distance.

Great attention to the cleanliness and airiness of every part of the hospital, is added to these advantages of situation. The diet of the children is well regulated ; and there is an abundant supply of spring-well water, from the city's reservoir, which adjoins the house ; and the medical gentlemen attached to the hospital, and acting under the regulations of the governors, put a negative on the admission of any child, who appears to them to labour under scrofula.

These circumstances are so favourable to the health of the inmates of this foundation, that I have the satisfaction to say, that during thirty-eight years, that I have had the medical superintendence of it, I have seldom known any serious illness prevailing among them.

The sons of burgesses, freemen of Edinburgh, are received into this hospital. They are admitted when between the seventh and eleventh year of their age; and are maintained and educated till they reach their fourteenth year. Their present number is one hundred and twenty, and they, together with the matron, masters, and domestics, form a family of about one hundred and forty persons.

Towards the end of September 1804, I visited one of the youngest of the children in fever. I found him labouring under symptoms of scarlatina, which had been epidemic in the town, for some months. He was moved immediately to the sick-room, and thus secluded from his companions; and I directed every precaution to be employed, in washing and ventilating the apartment or ward which he had left. The whole of the children were confined within the precincts of the hospital, lest, through communication with their relations in town, they might be affected with the fever, and thus add to the accumulation of contagion.

I was not, however, fortunate enough, indeed I did not expect to be so, to make this the solitary instance of the disease, in the midst of so numerous a family. Day after day, my sick list increased; and during three months that the fever prevailed in the hospital, upwards of fifty of the children passed through it. And I remarked, that by far the greatest number of the sick came from the ward in which my first patient had lain.

About the end of the year, the last of my little patients left the sick room, which was then shut, and it has fortunately continued so, to this date, 15th of March 1805; and some weeks have now elapsed, since communication with the town has been opened.

In all the children, particularly in those who were first affected, the symptoms were so mild, that but for my knowledge of the prevalence of the epidemic in town, I might have mistaken the disease on its first appearance, and been lulled into a blameable security. The throat was not much affected. The uvula and amygdalæ were slightly swelled and inflamed in every instance; in a few cases, superficial suppuration and sloughing appeared. The efflorescence on the surface was partial, and in general transitory, leaving a peculiar paleness of countenance. The eye was dull and heavy. Sickness and prostration of appetite continued throughout the disease. The thirst was moderate; great debility prevailed in every case; and in some a peculiar dejection and despondency, hardly to be looked for in subjects so young. The pulse was variable; always quick, till towards the end of the disease, when it sometimes sunk below the natural standard; it was never full. The surface of the body was occasionally of a pungent heat. Obstinate constipation prevailed in general.

My patients were objects of serious attention for twelve or fourteen days; the convalescent state of almost all of them, was protracted for nearly the same length of time; and six weeks elapsed before some who entered the sick room left it.

Such was the appearance, and such is the history of this epidemic in Heriot's Hospital; in conducting the cure of which, I employed purgative medicines fully; while food suited to the weak appetite and feeble powers of digestion was directed.

The effect of the purgatives was favourable. The feces were hard, generally of a black, or greenish colour, and fe-

tid: and sometimes of the colour and consistence of clay, and less fetid. In proportion to the evacuation of these feces, relief was perceptible. Returning appetite and vivacity accompanied the decline and cessation of the various symptoms.

As the weather had become cold, and otherwise inclement, the children were detained in the sick-room, for many days after they were perfectly well; purgatives were administered, as the state of the bowels demanded; and the general warm bath was repeatedly used, on the supposition, that, by its restoring a perspirable state of the skin, it would, in concert with the purgative medicines, tend to prevent dropsical swelling, which, from the symptoms, I greatly dreaded.

At last, healthy and robust, and impatient of farther restraint, the convalescents were permitted to return to their particular wards, and, in no long time, to mix with their companions in school, and at play.

Happy I am, that I had been thus careful and provident in using these precautions; for I have to relate the fate of three boys, who, in two or three weeks from their passing from under my care, were again reported as unwell, and again appeared in the sick-room. Their symptoms and their fate were the same. They had a leucophlegmatic look, incipient anasarca, total prostration of appetite, scanty, if not suspended secretion of urine, swelling of abdomen, obstinate constipation, nausea, extreme debility, and feeble pulse.

Alarmed by these symptoms, I requested Messrs Alexander and George Wood, surgeons to the hospital, to join

me in consultation. Suitable cordials were ordered, and purgative medicines, of appropriate quality, and in repeated doses, were directed. The disease, in all the three, proceeded with a rapidity, which afforded little farther opportunity for deliberation or action. The stomach gave way; all food, cordials, and medicines, were rejected, by vomiting. The watery effusion rapidly filled the cellular membrane, and inundated every cavity. Within less than thirty-six hours, from the recurrence of the ailment, the boys died, labouring under symptoms, denoting ascites, hydrothorax, and hydrocephalus.

This termination was altogether new; I had never seen dropsy from scarlatina fatal. In consequence of this event, I approached the hospital for many days, under deep anxiety, because I was conscious that other children were, at the time, in a situation which might lead to the same unfortunate issue.

I continued to pay unceasing attention to the alimentary canal, which every day's experience proved to be much disordered. Strong purgatives were given, in large and repeated doses, sometimes twice and thrice in the same day, before the necessary evacuation was procured. In some instances, the colon, hard and distended, could be traced by the finger, in those places where it approaches the parietes of the abdomen.

In two cases, general fulness of the belly, œdema of the lower extremities, nausea, retching, and scanty secretion of bloody-coloured urine, shewed themselves. In these, stimulating glysters supported and promoted the efficacy of the purgatives, and ensured a determination downwards; without which, I am satisfied, I should have had to regret the

loss of two other boys ; one of whom had taken, within the space of twenty-four hours, a drachm of the mass of the aloetic pill, and thirty grains of the submuriate of mercury. The other, when danger was over, was much distressed, by affection of the mouth, and bloody ptyalism, the consequence of the quantity of calomel previously given.

For greater security, an additional apartment was opened for convalescents. Here they were sedulously watched ; purgative medicines were occasionally employed, to secure and establish a regular state of the belly ; and returning appetite was satisfied with light and nourishing food.

I always inspected the alvine discharge of the sick ; the quantity of which, varying in consistence, colour, and fætor, daily evacuated during the fever by each boy, was astonishing to me.

An emetic was given occasionally, but not generally, on the approach of the fever ; and, towards its decline, a moderate quantity of wine was allowed. This seemed to be necessary, in a few instances ; but to avoid the appearance of partiality, the practice of giving it was general. Gargles composed of port wine, diluted with water, or of vinegar and water, sweetened with honey or sugar, were also employed in a few cases ; as were saline and diaphoretic mixtures. At length, under this management, care and anxiety on the present occasion came to a period.

Heriot's Hospital, }
15th March 1805. }

SECT. III.

TESTIMONY OF AUTHORS WHO ARE FAVOURABLE TO
THE USE OF PURGATIVE MEDICINES IN SCARLA-
TINA.

DR CULLEN observes, par. DCLXI. of the first lines of the Practice of Physic, "an open belly is proper in every form of this disease, and when the nauseating doses of emetics operate a little downwards, they are more serviceable."

DR RUSH, in his "Medical Facts and Observations, second edition," gives an account of the scarlatina anginosa, as it appeared in Philadelphia in the years 1783 and 1784, and in pages 124, 125, says, "I gave calomel in moderate doses in every stage of the disorder. To restrain its purgative effects when necessary, I added to it a small quantity of opium. During the whole course of the disorder, when the calomel failed of opening the bowels, I gave lenient purges, when disposition to costiveness required them."

In the Memoirs of the Medical Society of London, Vol. I. p. 419, Dr Sims, treating of scarlatina anginosa, says, "As I had always seen the greatest advantage in putrid or malignant diseases from the use of gentle laxatives, and have ever found rhubarb most consonant to the bowels of a Lon-

doner, I began, in the very first instance, with ordering it: my common prescription consisted of equal parts of rhubarb and sal polychrest, of which mixture as much was taken as procured about two motions a day." Again, page 440, "The best preventative of the disease I found to be rhubarb, taken in the quantity of a few grains every morning, so as to procure one laxative motion in the day. I did not see one who used this, confined afterwards to bed, though several persons obviously began it after they were infected, but before the time of their sickening."

DR BLACKBURNE on scarlet fever, Lond. 1803, remarking on Dr Withering's practice in a particular instance, says, page 52, "Dr Withering's fear of purging was so great, that he suffered his patient to remain costive eight days. Would not the interposition of a mild laxative or two have mitigated the most violent of the symptoms, and have rendered the frequent repetition of vomiting less necessary?"

Again, among other remarks on ~~the~~ symptom of purging, Dr Blackburne says, "It certainly does not occur in the moderate instances of scarlatina, and the dread of its presence ought not to prohibit the use of mild laxatives, which, so far as I have observed, uniformly abate the heat, thirst, headach, restlessness, &c. which enhance greatly the patient's sufferings, and protract as well as aggravate the febrile state."

APPENDIX IV.

MARASMUS.

SECT. I.

CASES OF PATIENTS WHO LABOURED UNDER MARASMUS, EXTRACTED FROM THE RECORDS OF THE ROYAL INFIRMARY.

Royal Infirmary, Dec. 29th 1804.

MALCOLM MORRISON, *Ætatis* 5.—Complains of pain of the right side, near the false ribs, attended by a dry hard cough, pain of forehead, and loss of appetite; pupils appear dilated. By account, awakes frequently during the night with a scream, is frequently observed to pick his nose, feces of a grey colour, and clayey consistence, urine turbid and scanty, countenance sallow, skin hot, pulse 120, and weak; complaints are, by account, of three weeks standing; has used no remedies.

R. Submuriatis hydrargyri grana decem,
Sacchari drachmam dimidiam,
Tere intume et divide in doses quatuor.
Sumat unam quaque hora.
Jusculi bovini libram unam, indies.

30th Dec.—Two stools, of the appearance of that described, general fulness of abdomen; no hardness observed in the right hypochondrium, pressure on which does not seem to give pain; some food taken.

R. Submuriatis hydrargyri grana tria,
Sacchari,
Jalapæ, singulorum grana sex.
Sit pulvis cras mane sumendus.

31st.—As yet no stool.

Si opus sit injiciatur enema domesticum vespere, et cras repetatur pulvis submuriatis hydrargyri.

1st Jan.—Copious alvine discharge, in all respects similar to former ones. Considerable fulness of abdomen continues, but pain of right hypochondrium and sallowness gone; injection not given.

Cras mane repetatur pulvis e submuriate hydrargyri cum jalapa.

2d.—A pretty copious, clay-coloured, and fetid stool; food taken.

Repetatur cras mane pulvis, ut heri prescriptum.

3d.—Spontaneous vomiting this morning of the contents of the stomach. Fetid and clay-coloured, but more scanty alvine evacuation, indifferent nights.

R. Tincturæ jalapæ.

Syrupi sacchari, utriusque drachmas duas.

Sit haustus mane et vespere sumendus.

Haustui vespertino, instillantur tincturæ thebaicæ guttæ decem.

Habeat vini rubri uncias tres indies.

4th Jan.—Has passed an easier night, and is now asleep, no vomiting, no stool.

Habeat haustum e tinctura jalapæ mane, meridie, et vespere, cum laudano in haustu vespertino, ut heri prescriptum.

5th.—A copious dark-coloured stool, no return of vomiting, a good night, appetite indifferent, but he appears to have gained in point of strength.

Continuetur haustus ut heri prescriptum, necnon vinum et jusculum bovinum.

6th.—No stool.

R. Carbonatis magnesiæ scrupulum unum,
Supertartritis potassæ,
Sacchari utriusque grana decem.
Sit pulvis, omni mane sumendus.
Continuentur haustus cum tinctura jalapæ.

7th.—Has had a copious alvine discharge, of a clayish colour and consistence, abdomen continues prominent, and somewhat tense.

Continuentur medicamenta.

9th.—Copious and dark-coloured alvine discharge continues; that since yesterday more watery and fluid than hitherto; abdomen less prominent and less tense, pulse 100 and feeble, appetite for food has declined.

Habeat vini rubri,
Aquæ, utriusque uncias tres in dies.
Continuetur pulvis carbonatis magnesiæ, et supertartritis potassæ, intermisso haustu e tinctura jalapæ.

10th.—Two stools, both scanty, but of more natural appearance than hitherto, and less fetid, considerable fulness

of abdomen, without pain, wine relished, appetite variable, pulse quick and feeble.

R. Submuriatis hydrargyri grana duo,
Pulveris jalapæ,
Sacchari, utriusque grana sex.
Sit pulvis, vespere sumendus.
Continuetur pulvis e carbonate magnesiæ, necnon vinum.

11th Jan.--Fulness of abdomen continues, with pain, particularly during night, which prevents sleep, copious alvine discharge, partly fluid, and partly consistent.

Habeat pilulas aloeticas octo ; sumat duas omni trihorio.
R. Tincturæ jalapæ drachmas tres,
Syrupi drachmam unam,
Aquæ uncias duas.
Sit haustus cras primo mane sumendus.
Continuetur vinum.
Intermittatur pulvis e carbonate magnesiæ.

12th.—Four copious fluid stools, of more natural appearance, but still very fetid, fulness of abdomen diminished, pain still continues, preventing sleep during the night, pills rejected by vomiting, pulse rather quick.

Repetatur haustus e tinctura jalapæ cras mane.
Continuetur vinum.

13th.—Spontaneous vomiting of contents of stomach this morning after breakfast, one fetid stool, natural, and in moderate quantity ; distention and pain of abdomen, preventing sleep, still continue ; pulse feeble.

R. Magnesiæ ustæ drachmam unam,
Mucilaginis gummi Arabici unciam dimidiam,
Spiritus lavendulæ compositi drachmas duas,
Tincturæ thebaicæ guttas viginti,
Aquæ uncias tres. Misce.

Sumat hujusce misturæ agitæ unciam dimidiam, secunda quaque hora.

Oblinatur abdomen linimenti anodynî pauxillo, ter vel quater indies, et circumdetur panno laneo.

Habeat vini rubri uncias quatuor indies.

14th Jan.—Has had a pretty copious fluid and feculent alvine discharge, accompanied with much flatus; passed a bad night, but pain of abdomen, and accompanying tension, for the present are subsided; has nearly declined all nourishment, the wine has been taken with reluctance; mixture sparingly given, on account of its exciting retching.

Pulse quick, but firmer.

R. Solutionis assæfætidæ unciam unam,

Aquæ, uncias quinque.

Sit mistura, ope fistulæ armatæ, per anum injicienda.

Continuentur alia ut heri.

15th.—Injection, after being retained for some time, was returned, accompanied with much flatus and feculent evacuation. This last, since yesterday, has been copious, nearly of natural appearance, but containing somewhat resembling scybala; food has been taken; wine relished, and mixture used; complains less of pain of abdomen, swelling and tension of which are abated.

Repetatur enema è solutione assæfætidæ.

Continuentur alia.

16th.—Injection retained till the morning; discharge of flatus and feculent evacuation has been less abundant, but tension and pain of abdomen continue relieved; food, wine, and mixture taken.

Continuentur vinum et mistura è magnesia.

A little beef-steak to dinner.

17th Jan.—Three stools, copious, and of a clay colour; belly rather tense, a good night; appetite continues to improve.

Continuentur vinum et mistura è magnesia.

18th.—Copious feculent discharge, resembling that which has been voided for some days past; belly less tense, and less pained; much flatus has been voided; appetite and strength are improved, and looks are more lively; injection has not been given.

Omisso enema, continentur alia.

20th.—Daily and copious alvine discharge, partly fluid, and partly costive, as formerly, somewhat resembling scybala, but now of more natural appearance and odour; pain and tension of abdomen continue to abate, and strength to improve.

Continuentur medicamenta.

21st.—Continuetur vinum, necnon mistura è magnesia cujus sumat dimidium tantum indies.

24th.—Belly continues regular; stools, except being somewhat of a whitish colour, natural; some fulness of abdomen remains, but pain is gone; quiet nights; appetite good; is become more active and more lively.

Intermittatur vinum.

28th.—Has continued convalescent.

Habeat pulveris jalapæ compositi unciam unam, in doses sedecim dividendam.

Signa, one to be taken once or twice a-day, so as to preserve a regular state of the bowels; warmth of surface and nourishing food recommended.

Dismissed cured.

Royal Infirmary, 18th Jan. 1806.

ALICIA CASSIDY, *Ætatis* 7.—Complains of a constant and frequently severe pain about the umbilicus, and of occasionally severe headach; she is observed to pick her nose much, and to start in her sleep, screaming violently; her abdomen is full and prominent; pulse quick and small; tongue loaded; belly very irregular; appetite voracious; her countenance is pale and languid, and she is said to have been falling off in respect of flesh and strength for the last eighteen months.

19th Jan.—R. Submuriatis hydrargyri grana duodecim,
Pulveris jalapæ,
Sacchari utriusque semi drachmam.
Misce, et divide in doses octo, quarum sumat
unam mane et vespere.

20th.—Plentiful alvine evacuation, partly fluid, partly consistent, and of a whitish clay colour.

Continuentur pulveres ut heri præscriptum.

21st.—Has had copious, partly fluid, and partly consistent, dark-coloured alvine evacuation.

Sumat pulveres ut supra præscriptum ter in dies.

f

22d Jan.—Alvine evacuation is scanty, consisting chiefly of dark-coloured scybala.

Continuetur submurias hydrargyri, et cras primo mane sumat duabus vicibus,
Infusi sennæ, uncias quatuor.

24th.—Alvine evacuation of yesterday copious, partly of a clayish consistence, and partly fluid, with scybala; the feces are fetid.

Sera nocte habeat bolum jalapæ compositum, cum submuriatis hydrargyri granis sex, et
Cras primo mane infusi sennæ uncias tres duabus vicibus.
Intermittantur pulveres à submuriate hydrargyri.

25th.—Spontaneous vomiting some hours after taking the bolus, several stools since morning, consistent, of more natural appearance and smell; starting, screaming under night, picking of the nose, with pale look and wasted appearance continue; complains less of gripes, and of headach; and appetite is less voracious; abdomen less full and tense; pulse firm, tongue clean.

Habeat vini rubri uncias tres, et
Juris bovis libram indies.
Omni mane pulveris jalapæ compositi scrupulos duos.

26th.—Alvine evacuation pretty copious, so ewhat scybalous, but of more natural appearance, and less fetid.

Continuentur pulvis jalapæ compositus,
Vinum et jus bovis.

27th.—Alvine evacuation sufficiently abundant; fluid, without scybala, or unusual fetor.

28th Jan.—Has easy nights, without screaming or starting; fulness of abdomen gone; is less disposed to pick the nose; countenance clear, eyes lively, appetite natural, belly regular; she is become playful and active.

Intermittantur pulvis jalapæ compositus, et vinum.

30th.—Free of complaint, but belly is rather slow, and feces consistent and of a white colour.

R. Submuriatis hydrargyri,
Sacchari utriusque grana tria,
Sit pulvis omni nocte sumendus.

R. Infusi sennæ,
Infusi lini utriusque unciam,
Succi spissati glycyrrhizæ drachmam dimidiam.
Sit mistura, omni mane sumenda.

31st.—Alvine evacuation has been more than usually copious; it is lumpy, and of a whitish colour, without fætor; her looks continue to improve in respect of colour and liveliness of countenance; easy nights.

Continuentur infusum sennæ et pulvis.

1st Feb.—Alvine evacuation less abundant than that of yesterday; it is still lumpy, but of a natural colour.

Repetantur submurias hydrargyri et infusum sennæ.

2d.—Feces in respect of quantity and appearance correspond with the description of yesterday.

Repetantur medicamenta.

3d.—Full alvine evacuation, of the consistence and appearance last described; she continues free of ailment.

Habeat pulveris radice jalapæ unciam, in doses viginti quatuor divisam.

Signa, laxative powders; one occasionally, so that a regular alvine evacuation be procured.

Dismissed cured.

Royal Infirmary, 26th Dec. 1807.

MARGARET KENNEDY, *Ætatis* 8.—Complains of shifting pains in the right hypochondriac region, attended by watery eructations, of a sour taste, and a sensation as if a ball came up from her stomach to her mouth. The abdomen is rather full, especially in the place where she feels the pain. Is troubled with frequent startings during her sleep, especially of the right side, and grinds her teeth during the night; pulse natural, tongue clean, appetite good, considerable thirst, belly slow.

Complaints began about a fortnight ago. Has used some calomel powders, which opened her bowels.

R. Submuriatis hydrargyri,
Sacchari albi utriusque grana quinque. Miscæ.
Sit pulvis statim sumendus.

27th Dec.—Copious alvine evacuation, feces fetid, partly fluid and partly lumpy.

Repetatur submuriæ hydrargyri ut heri.

28th.—Alvine evacuation is less copious than that of yesterday, part of the feces is fluid, part formed and hard, but less fetid; pain of hypochondrium, eructation, and sense of ball rising from the stomach are relieved, abdomen is less full, and she has passed a better night.

Repetatur submuriæ hydrargyri.

29th Dec.—Alvine evacuation is rather scanty. It is fluid, dark-coloured, and fetid, mouth slightly sore.

Utatur gargarismate communi.
Omittatur submuriæ hydrargyri.

30th.—One alvine evacuation since yesterday; pain of abdomen and stomachic symptoms are still further relieved.

Habeat jusculi bovini libram unam indies.
Infusi senna unciam cum semisse cras mane.
Continuetur gargarisma.

31st.—Feces natural with respect to colour and form, but still fetid.

Repetatur infusum sennæ.

1st Jan. 1808.—Convalescent, stools natural in all respects.

Continuetur infusum sennæ omni mane.

Full diet.

3d.—Feces rather hard, in other respects natural.

Habeat cras mane infusi sennæ uncias tres.

6th.—Has continued convalescent.

Habeat pulveris jalapæ compositi unciam in doses octo dividendam.

Signa, one every second morning.

Dismissed cured.

SECT. II.

CASE OF EUPHEMIA WINTER, FROM THE TRADES
MAIDEN HOSPITAL.

September 25th, 1805.

ABOUT the middle of August last, Euphemia Winter, one of the children entertained in this Hospital, twelve years of age, complained of severe headach, sickness, and constant vomiting of the contents of the stomach. Mr Wood, surgeon of the Hospital, asked me to visit her, which I did a few days after the appearance of the above symptoms. She was confined to bed. She appeared to be languid; her eyes were heavy, but she was strongly susceptible of the impression of light, which gave her much uneasiness; her pulse was feeble. With these she laboured under prostration of appetite, want of sleep, and obstinate costiveness.

She had been taking pills of calomel and rhubarb, with little effect on her bowels; but her mouth became sore, and her breath acquired the mercurial fetor.

We were not without apprehensions for the event of these symptoms, which seemed to us to indicate approaching hydrocephalus. We put our patient on a course of aloetic pills, of which ten grains were given frequently for several days together, and the calomel was omitted. The alvine discharge became more copious; the feces were peculiarly fetid, and of a dark-green colour. The propensity to vomit having subsided, powder of jalap, in doses of fifteen grains, repeated at short intervals, was substituted for the aloetic pills.

Under this course, the belly became more and more regular, till at last natural motions were procured, and the different complaints gradually abated. In four weeks from the first attack, this girl, furnished with proper purgative medicines, went to the country, for the complete re-establishment of her health.

SECT. III.

COMMUNICATIONS ON THE TREATMENT OF MARASMUS BY PURGATIVE MEDICINES.

I was consulted, along with Mr James Russell, and Mr Stewart, surgeon at Gogar, on the following case, the treatment of which was conducted by Mr Stewart, the patient living in his vicinity, a few miles distant from Edinburgh. Mr Stewart, at my request, favoured me with the account of it, which I now present, under the form of a letter addressed to me.

“ SIR,

“ H. T. thirteen years of age, was observed in autumn 1806, to fall off in respect of looks, flesh, strength, and appetite, when I and Mr Russell were joined with you in consultation upon his case. At this time, his countenance was pale and inanimate, his muscular flesh was much wasted, his belly was remarkably turgid and hard, his tongue was dry and loaded, and his pulse was quick. A complete paralytic affection of the lower extremities, with frequent tormenting cramps, had supervened.

“ Our patient appeared to hang his head forward, and a protuberance of the inferior cervical and superior dorsal vertebræ having been observed, the whole ailment had been attributed to this circumstance. Bark, wine, tonic and purgative medicines had been employed, the latter irregularly and with little effect, and a seton had been passed

on either side of the supposed diseased or misplaced vertebrae.

“ In this deplorable and helpless condition of our patient, we wished to be satisfied with respect to the state of the bowels, and ordered a full dose of jalap and calomel, the effects of which showed that considerable constipation prevailed. Our first, and indeed our only care during a protracted attendance, was to obviate this circumstance; which was gradually effected by the exhibition of the *pilulae aloeticæ*, forty-eight grains of the mass of which was the daily average dose, except when the following powder was occasionally substituted.

R. Pulveris radicis rhæi,
Supertartritis potassæ,
Sulphuris potassæ cum sulphure,
Singulorum grana decem. Misce.

“ By these means dark-coloured and fetid feces, and varying in consistence, were voided in considerable quantity, day after day, for the period of four months nearly, when the feces assumed a more natural appearance, with less of peculiar fetor. The appetite and looks were at the same time improved, the pulse became moderate, the cramps vanished, and the power of moving the lower extremities was restored.

“ Our patient was now enabled to take moderate exercise on foot and on horseback, and, about the end of the fourth month from the commencement of my attendance, his recovery was completed.

“ The setons, which procured a precarious and scanty discharge, and which excited much irritation, without pro-

ducing sensible relief, had been withdrawn in the early part of the treatment.

“ In concluding this narrative, I cannot withhold my opinion, that the decided interposition of the purgative medicines had saved our patient; for besides these, I am not acquainted with any remedy that could have averted a fatal termination of the ailment.

I am, &c.

(Signed,) ALEXANDER STEWART.”

“ GOGAR-LODGE, 12th Jan. 1809.”

“ Dr HAMILTON.”

LETTER FROM MR JAMES RUSSELL, SURGEON, EDINBURGH, TO THE AUTHOR.

St Andrew's Square, 18th Sept. 1805.

MY DEAR SIR,

I shall be happy to give you an account of the case of my daughter, whom you and Mr Benjamin Bell did me the favour to attend, in summer 1803. The child was then about three years old, and had been falling off in her health, some time before you saw her. She was then pale and languid, with a quick pulse, loaded tongue, and impaired appetite. But as she was reported to have had regular and daily evacuation of her bowels, none of these symptoms were ascribed to costiveness. Soon after you began to visit, however, you suspected an accumulation of feces to be the chief of her complaint, and wished to treat the case according to this view. But, notwithstanding every proper remedy was employed, without loss of time,

she got gradually worse for some days; till at last she showed some tendency to stupor, accompanied with pain in her head, and throbbing of her temples. The presence of these symptoms suggested a suspicion of an incipient attack of hydrocephalus, which made so strong an impression upon the attendants, that leeches were applied to the head, and the blood discharged produced some temporary relief. Notwithstanding all these variations in the symptoms, however, you still continued steady to your original opinion, and persevered in the practice of giving laxative medicines. Perseverance in this plan, gradually unloaded the bowels from a quantity of feculent matter, which appeared to have been lodged for a considerable time, and procured very manifest relief. From the time of this salutary discharge, the symptoms became daily more moderate, till at last the recovery was complete.

Upon reviewing all the circumstances of this case, which naturally attracted much of my attention, I regard it as a satisfactory illustration of your opinion, respecting the effect of costiveness, in exciting much distress, and in producing symptoms which counterfeit diseases, that are generally supposed to have a very different origin. I am,

with much respect,

my dear Sir,

ever, most sincerely,

yours, &c.

JAMES RUSSELL.

Dr JAMES HAMILTON.

LETTER FROM MR BENJAMIN BELL TO THE AUTHOR.

Newington-house, 20th Sept. 1805.

DEAR SIR,

As you favoured me with the perusal of the manuscript, which you are about to publish, on the utility of purgative medicines in certain diseases; and as the practice which you inculcate meets with my approbation, I think it right to communicate to you a remarkable instance of the good effects of this practice, which has recently occurred to me, in one of the most fatal diseases with which we are acquainted.

On Wednesday, the 4th instant, I received an anxious call from a family newly arrived at one of our hotels, from the distance of forty miles, with their eldest daughter, a girl of about eight years of age; who had become unwell on Saturday the 24th of August last.

Her symptoms, when I visited her, were, severe headach, greatly aggravated by motion. Pulse 96, and irregular; the pupil of each eye was more dilated than in health, scarcity of urine, an uncommon dryness of the skin; and no discharge from the nose.

All the remedies that are commonly used in ordinary cases of headach had been prescribed, without any advantage; such as the local discharge of blood by leeches; the discharge produced by a blister, and gentle doses of calomel and jalap.

The symptoms being aggravated by the journey, I again advised leeches to be applied, and a laxative of calomel and jalap to be given, which operated properly, and afforded relief. The head was likewise shaved; but the case being highly important, I advised an early consultation, which being agreed to by the family, Dr Monro, senior, and Mr James Russell, surgeon, one of my partners, met with me, accordingly, next morning. The opinion adopted at this consultation, was, that the symptoms were those of hydrocephalus internus. We directed a grain of calomel, and the same quantity of the powder of foxglove, to be given three times a-day; a drachm of the stronger mercurial ointment to be rubbed on her limbs, evening and morning; a blister to be applied to the crown of the head; and the powder of betony to be used as snuff, in order to excite a discharge from the nose.

This plan was continued, and in the course of the third day the gums were red and swelled, but still no benefit was derived from the mercury. The pain of the head had been relieved by the leeches, but it soon became as violent as before; the iris was, in a considerable degree, insensible to the stimulus of light, and the pulse was quick and irregular.

With these symptoms, she now complained of severe pain in her bowels, which led to the suspicion of their being oppressed with an accumulation of feces, notwithstanding the laxatives which had already been given. A full dose, therefore, of an infusion of senna was exhibited, on the morning of the 9th instant. Next day, we found that the senna had purged briskly, not less than nine times; and at every motion that a large quantity of black-colour-

ed feces, fully formed, and uncommonly fetid, had been discharged.

Perceiving that she was relieved, her head being less pained, and the pulse more regular, another dose of senna was given, early in the forenoon of the 11th; and the mercurial medicines were omitted. This dose also, operated briskly, and brought off, notwithstanding the large evacuations of the preceding day, six or seven copious stools, all of them uncommonly fetid, and of a dark colour. She suffered much from sickness, oppression, and gripes, during the operation of both doses of senna; but immediately after the last dose, every symptom of disease vanished. The headach was felt only on quick motion; her eyes recovered their natural appearance; her pulse was regular; and she became equally alert as in her best health.

On the 12th she had a third dose of senna, not, however, so strong as the preceding ones; but nevertheless it procured three or four stools, less fetid than the former, and of more natural appearance.

On the morning of the 13th, our patient informed us, that she was cured of all her complaints. And her mother, who watched her carefully in every state of her illness, said, that ever since the violent purging, produced by the senna, on the first exhibition of it, she, as well as the servants, had remarked, that a disagreeable noise, which took place during the sleep of our patient for several years, and which was occasioned by the grinding of the teeth, had ceased.

As our patient continued perfectly well, she was permitted to return to the country, on the 17th instant. Her

mother was directed to give her repeated laxatives for some time, to prevent immediate accumulation of the feces ; and to interpose them on any occasion in future, when the stools appeared to be unnatural, or not sufficiently copious.

I remain, dear Sir,

Your's, faithfully,

BENJ. BELL.

Dr HAMILTON.



The Mother of this Girl wrote to Mr BELL on the 29th
October 1805, to the following effect:

“ DEAR SIR,

“ As you were so good as request me to let you hear again of my little girl, I trouble you with a few lines, to say she is now almost quite well ; indeed, when she does not take too much liberty with herself, she is entirely well. I was impatient when I last wrote you ; but your answer was very satisfactory, and has turned out exactly true. It must be admitted that purgative medicines have been her cure, which I find necessary to continue once a-week, but hope, as she gets stronger, these may be got rid of.

I remain, Dear Sir,

Your humble servant,

_____.”

APPENDIX V.

CHLOROSIS.

CASES OF PATIENTS WHO LABOURED UNDER CHLOROSIS,
EXTRACTED FROM THE RECORDS OF THE ROYAL INFIRMARY.

Royal Infirmary, 28th Oct. 1806.

JANE ROBERTSON, *Ætatis* 19.—Complains occasionally of severe headach and vertigo, gnawing pain, referred to the stomach, and increased after taking food, of dyspnoea, palpitation of the heart, and syncope, from any sudden surprise. Is affected also with listlessness, and aversion to usual employments, feebleness, particularly of the lower extremities, which are œdematous; countenance is languid, skin of a yellowish colour, muscular flesh soft and flabby, pulse 89, weak, belly in general slow, urine scanty, tongue whitish, appetite impaired, appearance of catamenia, which are deficient in quantity, preceded by pain of lower belly, back and loins.

Complaints, ascribed to cold, began three years ago. Friction of the legs and feet, and gentle laxatives have been used, without much effect.

Sumat bolum jalapæ compositum.

29th Oct.—Scanty alvine evacuation, feces are formed, somewhat of a light green colour, and fetid. Some food taken, passed a good night.

Habeat pilulas aloeticas octodecim,
Sumat tres omni bihorio.
Jusculi bovini libram unam indies.

A bason of tea to breakfast.

30th.—Alvine evacuation since yesterday not over-abundant, feces costive and lumpy, in other respects of natural appearance, but of fetid smell. Pills taken.

Habeat vespere pilulas ex aloe et gambogia octo, et cras
primo mane, infusi sennæ uncias tres, ex infusi lini un-
ciis quinque.

31st.—Alvine evacuation since yesterday abundant, fluid, and of more natural appearance, but still fetid. Pills and infusion taken.

Habeat pilulas ex aloe, et gambogia, sex vespere, et re-
petatur cras mane infusum sennæ, ut heri præscriptum.

1st Nov.—Headach and vertigo are relieved, œdema of lower extremities nearly gone, countenance more lively, and of more ruddy and healthy appearance; syncope has not occurred, appetite improved, tongue clean; palpitation and stomachic complaints, listlessness and debility, continue.

Alvine evacuation since yesterday copious, of bright yellow colour, partly fluid, partly lumpy, and somewhat scybalous.

Habeat pilulas ex aloe et gambogia quatuor vespere.

2d.—Alvine evacuation since yesterday is less abundant, feces of the same bright yellow colour, lumpy, and peculiarly fetid.

Habeat pilulas ex aloe et gambogia sex vespere.

A beef steak to dinner.

3d Nov.—Alvine evacuation more copious, and of more natural colour than that of yesterday, in other respects resembling it.

4th.—Alvine evacuation more abundant than that of yesterday, feces of natural colour, still fetid, consistent and formed.

Habeat pilulas ex aloe et gambogia octo vespere.

5th.—Alvine evacuation less abundant, more fluid, and of darker colour than that of yesterday.

Repetantur pilulæ ut heri.

6th.—Feces, since yesterday, abundant, rather fluid, approach to the natural colour, and are less fetid.

R. Aquæ uncias duas,
Magnesiæ scrupulos duos,
Tincturæ jalapæ drachmas duas.
Sit haustus omni mane porrigendus.
Intermittantur pilulæ.

7th.—Alvine evacuation rather scanty; otherwise as yesterday.

Habeat pilulas aloeticas sex vespere.
Repetatur haustus, ut heri.

8th.—Alvine evacuation not more abundant, and, in other respects, similar to that of yesterday.

Repetantur pilulæ ut heri.
Continuetur haustus.

9th Nov.—Headach, stomachic complaints, and œdema of lower extremities entirely gone; still occasional vertigo; dyspnœa and palpitation, formerly constant, are now excited only by considerable exertion; strength much improved, countenance still more lively, and of more healthy appearance, appetite good, tongue clean, feces in respect of quantity and appearance as yesterday.

Since morning has had two attacks of syncope, the first since admission, and of shorter duration than formerly.

R. Vini rubri uncias octo,
Aquæ uncias quatuor.
Sit mistura cujus sumat uncias duas subinde.
Intermittantur cathartica.

11th.—Free of ailment, regular alvine evacuation, feces rather scanty, and indurated, otherwise natural.

Habeat pilulas aloeticas tres omni nocte,
Vini rubri uncias quatuor indies.

12th.—Repetantur pilulæ ut heri.

14th.—No stool since yesterday, continues free of complaint, catamenia appeared this morning.

Continuentur pilulæ et vinum.

16th.—Belly has been regular, and she is free of ailment.

R. Pulveris radice jalapæ drachmas tres.
Divide in doses quindecim æquales.

Signa, one occasionally.

Dismissed cured.

Royal Infirmary, 9th Jan. 1808.

JANET KINNEARD, *Ætatis* 19.—Complains of frequent severe fits of gastrodynia attacking her suddenly, and most frequently immediately after taking food, occasional gripes, frequent headach; appearance is languid, and countenance peculiarly pale, tongue clean, appetite middling, considerable thirst, pulse natural, catamenia regular.

Her complaints are of six months duration; since their commencement have been attended by costiveness. Knows no cause for them, and has used no medicines.

10th Jan.—Has had this morniu^g a severe attack of pain of epigastrium. Headach is less severe, no stool.

Habeat pilulas aloeticas sexdecim; quatuor omni bihorio.

11th.—Has had full alvine evacuation; feces are in part lumpy, in part soft, and of a light clay colour.

Pilulas aloeticas octo, hora somni.

12th.—Feces abundant, and less lumpy, and more of a natural colour; complains still of gastrodynia, but less of headach, countenance is clearer, and eye more lively than at admission.

Repetantur pilulæ aloeticæ octo.

13th.—No stool since yesterday; improves in expression of countenance and liveliness of eye, and is easier in respect of gastrodynia and headach.

Repetantur pilulæ aloeticæ.

16th Jan.—Full alvine evacuation; feces are soft. Free of ailment.

Habeat pulveris radice jalapæ unciam dimidiam, in doses duodecim divisam.

One each morning.

Dismissed cured.

APPENDIX VI.

VOMITING OF BLOOD.

CASES OF PATIENTS WHO LABOURED UNDER VOMITING OF BLOOD, EXTRACTED FROM THE RECORDS OF THE ROYAL INFIRMARY.

Royal Infirmary, 18th Feb. 1805.

MARY MUNRO, *Ætatis* 28.—Has pain and sense of weight at the scrobiculus cordis, increased on pressure. Headach and vertigo, vomiting of ingesta, and sometimes, by account, grumous blood, to a considerable extent, is brought up by coughing; much debility, and lowness of spirits, appetite impaired; pulse 80, skin cool, belly habitually costive, catamenia regular, and rather profuse; says she has had stomachic complaints more than a year and a half; the discharge of blood occurred first about the beginning of this winter, preceded by occasional epistaxis for a month before; has used no remedies before admission, but has taken a bolus since, which procured a dark-greenish stool.

Habeat pilulas aloeticas tres omni trihorio.

19th Feb.—By account, two dark greenish-coloured stools have been passed this morning.

Continuentur pilulæ aloeticæ, ut heri præscriptum.

20th Feb.—Twelve pills taken; five copious dark greenish-coloured stools, stomachic symptoms, headach, and vertigo are relieved, pulse calm, no vomiting.

21st.—No stool, no vomiting, weight at epigastrium, pulse calm.

Repetantur pilulæ aloeticæ, ut supra præscriptum.

22d.—Several stools of more natural appearance; no return of vomiting, stomachic symptoms still more relieved, and expression of countenance more lively.

23d.—No stool, apparently convalescent, appetite good.

R. Sulphatis magnesiæ drachmas tres,
Sulpertarthritis potassæ drachmam unam. Misce.
Sumantur omni mane, ex aquæ unciis sex vel octo.

26th.—Belly has been regular, appetite has continued good, and to all appearance she has been free of ailments.

Habeat pulveris jalapæ compositi uncias duas, in doses triginta duas divisas.]

Signa, one each morning.

Dismissed cured.

Royal Infirmary, 28th April, 1805.

JEAN CLARKINSON, Ætatis 29.—Complains of a general soreness in her breast, with great oppression about the præcordia, headach, and some degree of languor. Says

she has been affected for three weeks with frequent vomiting of fluid and dark-coloured blood, sometimes to the amount of a pound⁴ or more; that she has always vomited more or less every day during that time. At present she has little or no cough; but when she first became affected, she had a severe cough, with great hoarseness.

Pulse at present 66, and very weak, tongue white, belly habitually costive, appetite impaired, catamenia natural.

Attributes her complaints to carrying heavy loads of coals; has been using the pulvis cinchonæ, with porter, without relief.

29th April.—A small discharge of blood, brought up apparently without retching; no stool since admission.

Habeat statim bolum jalapæ compositum cum mercurii granis octo, sera nocte, nisi prius soluta fuerit alvus, enema domesticum.

Juris bovini libram vel alteram indies.

30th.—General soreness of breast, oppression about præcordia, headach and faintness are relieved, pulse firmer, and expression of countenance more lively; a copious, fetid, dark and greenish-coloured alvine evacuation; no vomiting.

Habeat pilulas aloeticas duodecim; sumat tres omni bishorio; et pilulis sumptis, repetatur enema, ut heri.

1st May.—Injection not given; has had two pretty copious stools, feces formed, but still of a dark and greenish colour; uneasiness of præcordia, oppression of the breast, and headach are still more relieved; no vomiting.

Vespere repetatur bolus jalapæ compositus, ut supra præscriptum, et cras primo mane habeat tartritis sodæ et potassæ unciam ex aqua.

2d May.—No vomiting, in other respects free of ailment; a very copious alvine evacuation since morning, and of more natural appearance than hitherto.

Repetantur cathartica ut heri præscriptum.

3d.—Has had pretty full alvine evacuation, somewhat costive, but in colour more approaching to the natural. Is free of ailment.

Habeat pulveris jalapæ drachmas quatuor in doses octodecim divisas.

Signa, one occasionally.

Dismissed cured.

Royal Infirmary, 11th April 1805.

MARTHA IRVINE, *Ætatis* 23.—Says, that on Sunday, the 27th ultimo, she became affected with great difficulty of breathing, severe pains through her chest, and a sense of great weight about the region of the stomach; which complaints were immediately succeeded by violent retching, when she discharged a quantity of clotted blood, and immediately felt herself relieved. On the ninth, the above symptoms recurred, and she vomited about a pound of liquid, which, in every respect, resembled pure blood; and yesterday she discharged nearly the same quantity; since which time she has been pretty easy. Complains, at present, of a general soreness in her breast, of a sense of great weight in her stomach, frequent cough, and occasional headach; pulse 72, and weak, tongue white, belly, by account, has been regular, and catamenia natural. Attributes

her complaints to fatigue, and carrying heavy loads; has used no medicines.

12th April.—Cough, by account, is of a fortnight's duration, and has been accompanied with pain about the middle of the sternum; no stool since admission, tongue clean, pulse calm and feeble.

Habeat emulsionis communis libram unam indies.

13th.—No stool, no vomiting, cough has become less frequent, and, by subsequent account, the pain mentioned yesterday seems to be seated about the scrobiculus cordis. Headach is increased, and she complains of oppressive sickness; pulse towards 90, and firmer.

Continuetur emulsio.

14th.—Has had neither vomiting, nor evacuation by stool, cough nearly gone, headach, and much sickness continue.

Continuetur emulsio communis.

15th.—Has had neither passage of belly, nor vomiting, complains of severe headach and sickness, oppression and pain of epigastrium, cough gone, pulse calm.

Habeat enema purgans. Omittatur emulsio.

16th.—Headach and oppression of præcordia continue, sickness relieved, no vomiting, copious alvine discharge after the injection.

Habeat quam primum bolum jalapæ compositum, cum mercurii granis decem; et sera nocte, nisi fluxerit alvus, enema domesticum.

17th.—Headach and oppression about præcordia are

much relieved, expression of countenance lightened; very copious, consistent, dark-coloured alvine evacuation.

Repetatur quam primum bolus necnon enema, ut heri.

18th April.—Alvine evacuation similar to that of yesterday, injection not given, vomiting of blood has not recurred, and she is free of ailment.

Repetatur bolus, ut supra præscriptum.

19th.—Alvine evacuation resembling the last, but in smaller quantity; no recurrence of complaint.

Habeat pilulas ex aloe et colocynthide duodecim.

Signa, two every night.

Dismissed cured.

I did not doubt the veracity of this patient, Martha Irvine.—Her symptoms and her appearance convinced me that she laboured under vomiting of blood; but I was willing that the existence of the disease should be placed beyond a doubt, by the actual discharge of blood, in order that my practice, which was to follow, might be more decidedly conclusive in favour of purgative medicines in this disease. I therefore temporised for the first four days. But her sufferings increasing, commiseration for my patient made me desert my scheme. I could not longer withhold the certain means of relief which I had at command. In five days from my first employing these, she left the hospital in perfect health.

Royal Infirmary, 6th Nov. 1805.

BETTY ROBERTSON, *Ætatis* 20.—Complains of a sense of weight, and great uneasiness about the chest and præcordia, headach, and great languor. Her eyes are dull, her countenance pale, and expressive of much distress; has some difficulty in breathing, but little or no cough; says, that in the course of last night and this morning, she has discharged, by vomiting, a considerable quantity of pure, liquid, but dark-coloured blood; pulse quick, and soft, tongue white, belly habitually slow, and for the last four days she has had no stool, catamenia natural; knows of no cause for her complaints.

Habeat quam primum pilulas aloeticas duodecim.
Sumat tres omni trihorio.

7th Nov.—Uneasiness about the præcordia, and sense of weight somewhat relieved, headach gone; pills taken, one costive dark-coloured and fetid stool; no recurrence of bloody discharge.

R. Sulphatis magnesiæ drachmas quinque,
Infusi sennæ uncias duas,
Infusi lini uncias quatuor.
Misce. Sumat uncias duas omni hora.

8th.—By mistake the mixture was omitted; no stool since yesterday, slight return of vomiting of blood, complains more of uneasiness and tightness across the chest.

Habeat statim solutionem catharticam, ut heri præscriptum est.

9th Nov.—Solution taken, as yet no stool, severe attack of vomiting of blood last night, followed by relief of previous uneasiness and stiffness in the chest; but she complains of a general soreness about the inferior part of the sternum.

Habeat pilulas aloeticas octodecim.
Sumat tres omni bihorio.

10th.—One costive stool this morning, no return of vomiting of blood, nine pills taken.

Continuentur pilulæ aloeticæ.

11th.—The eighteen pills taken with the effect of only one costive stool, but complains less of uneasiness; no vomiting of blood.

12th.—Complains of severe pain about the scrobiculus cordis, of slight cough, and general uneasiness; pulse quick and sharp, tongue white, no stool, no vomiting.

Habeat pilulas laxantes quatuor, omni bihorio ad quintam vicem.

13th.—Twenty pills taken, one scanty stool has been voided, and, at three different attacks, about ten ounces of pure blood have been discharged.

Enema purgans vespere.

R. Sulphatis magnesiæ unciam,
Supertartritis potassæ drachmas duas,
Solvantur in aquæ libra, cujusumat uncias quatuor
omni semihora post enema redditum.

14th.—A fluid and rather scanty stool after the injection, another since morning, also fluid and dark-coloured, with numerous small scybala floating in it.

R. Tartritis sodæ et potassæ uncias duas,
Infusi sennæ uncias quatuor,
Infusi lini libram cum semisse.
Sit solutio, cujus sumat uncias quatuor omni hora.

15th Nov.—The whole of the solution being taken, pretty copious alvine evacuation has ensued, the first part of which is fluid, dark-coloured, and fetid, containing several scybala. The latter part is also fluid and fetid, with similar scybala, but it has a more natural appearance; expression of countenance lightened, no vomiting of blood.

Repetatur solutio cathartica ut heri.

16th.—Alvine evacuation since yesterday rather scanty, fluid, without scybala, and more natural in respect of colour and odour; no vomiting of blood, solution taken.

17th.—Has had pretty copious alvine discharge since yesterday, natural in respect of colour and smell; no vomiting of blood, free of complaint.

R. Pulveris rhei grana duodecim,
Ipecacuanhæ grana duo.
Capiat omni mane.

19th.—Free passage of belly, appears lively and cheerful, no vomiting of blood.

20th.—Dismissed cured.

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APPENDIX VII.

CHOREA.

SECT. I.

CASES OF PATIENTS WHO LABOURED UNDER CHOREA,
EXTRACTED FROM THE RECORDS OF THE ROYAL INFIRMARY.

Royal Infirmary, 2d Aug. 1802.

WILLIAM SINCLAIR, *Ætatis* 10.—Affected with irregular involuntary motions of the superior extremities, and occasionally with a diseased action of the muscles of the face, producing great distortion in the expression of the features, attended with flushing in the face, pain in the occiput, and difficult articulation. Although he cannot stand erect without being supported, yet he possesses in some degree the command over the inferior extremities, and was observed, before this took place, to drag one leg after the other. He seems much debilitated, belly is somewhat tense and tumid, pulse about 90, rather feeble, appetite impaired, belly regular, but the stools in small quantity. He was taken ill a fortnight before admission, and within these few days the symptoms have become worse. Has used no remedies.

3d Aug.—R. Mercurii dulcis grana tria.
 Pulveris jalapæ grana decem.
 Fiat pulvis, cras primo mane sumendus.

5th.—The stools of yesterday and this morning are copious, and of natural appearance, belly is less tense, pulse calm; irregular motions and pain of occiput continue, but he walks with more steadiness.

Cras repetatur pulvis è jalapa cum mercurio.

6th.—One feculent stool since morning; headach and irregular motions nearly the same, his step is still more steady and firm.

8th.—Has continued convalescent.

Habeat mercurii dulcis grana decem,
 Sacchari scrupulos duos.
 Intime misceantur et dividantur in doses octo.

Signa, one every night.

Dismissed cured.

Royal Infirmary, 12th Sept. 1803.

ELIZABETH LAURIE, *Ætatis* 14.—Is affected with almost constant involuntary motions of the left arm. The muscles of the face are also involuntarily contracted, and in walking she is observed to drag the left leg after her; articulation is at times impeded, skin of natural heat, pulse 75, belly, by account, regular; has laboured under this ailment two weeks; it was preceded by headach and spontaneous vomiting. She has used some medicines, with the nature of which she is unacquainted.

13th Sept.—Habeat quam primum bolum e jalapa cum mercurio.

Sera nocte, ni solvatur alvus enema domesticum.

14th.—Several copious feculent but fetid stools.

Habeat omni nocte pilulas aloeticas tres.

15th.—One stool in the course of the evening. Involuntary motions abated.

Repetantur pilulæ aloeticæ vespere: et sumat cras mane, infusi sennæ uncias tres.

16th.—Has had free passage of belly, stools more frequent, but still fetid, motions more staid.

Repetantur pilulæ aloeticæ et infusum sennæ.

17th.—Walks with increasing firmness and vigour, irregular motions of left arm continue, no stool.

Habeat quam primum haustum ex oleo ricini.
Repetantur pilulæ aloeticæ et infusum sennæ.

18th.—Continuentur pilulæ et infusum, ut heri præscriptum.

19th.—No stool, involuntary motion of left arm aggravated.

Habeat quam primum bolum e jalapa cum mercurio.
Intermittantur pilulæ aloeticæ et infusum sennæ.

20th.—Consistent, fetid, bilious stool; rejected the bolus, by vomiting.

Pilulas aloeticas duodecim; sumat duas omni quadrihorio.

21st Sept.—No stool.

Continuentur pilulæ, ut heri.

22d.—Passage of belly in the course of yesterday, motions of the arm more steady.

Continuentur pilulæ, ut heri.

24th.—Belly open, stools of firm consistence, dark colour, and still fetid, irregular motions still more relieved.

Continuentur pilulæ aloeticæ.

26th.—No stool since the 24th. Pills have been regularly taken.

Habeat vespere enema purgans; et cras mane infusi sennæ
uncias quatuor, duabus vicibus.
Intermittantur pilulæ aloeticæ.

27th.—Three natural stools.

Habeat pulveris jalapæ compositi uncias duas; divide in
doses sedecim.

Signa, one every morning.

Dismissed cured.

Royal Infirmary, 28th Dec. 1803.

THOMAS WYLIE, Ætatis 9.—Has constant irregular and involuntary motions of both superior and inferior extremities; the right side seems to be more affected than the left; these motions continue during sleep; when he walks, he has the appearance of dragging the one leg after the other: his head is also occasionally moved involuntarily,

with twitchings in the muscles of his face, and some difficulty of articulation; pulse natural, belly open. These symptoms have been present eight days; the right side was first affected. He has used some calomel powders.

29th Dec.—Several small dark-coloured stools since admission.

Habeat bolum e jalapa cum mercurio.

30th.—But a scanty feculent discharge, preceded by vomiting, much thirst, tongue white; involuntary motions continue, not interrupted during sleep, appetite indifferent, pulse feeble.

Repetatur bolus e jalapa cum mercurio.
Jusculi bovini libram, indies.

31st.—Two stools, both scanty, of a pale yellow colour and somewhat tough consistence; involuntary motions are less violent, and disappear during sleep. He walks more steadily.

Repetatur bolus e jalapa cum mercurio.

1st Jan. 1804 —Two stools, the first pretty copious, and much resembling those of yesterday; involuntary motions more abated, appetite continues indifferent.

Repetatur bolus e jalapa cum mercurio.

2d.—Involuntary motions more abated, and movements more steady and firm; two or three small stools of a pale colour.

Sumat pilulas aloeticas duas, omni trihorio.

3d Jan.—Copious feculent discharge, of natural appearance, eyes more lively, and countenance of more healthy appearance, involuntary motions nearly gone, appetite improves, ten pills taken.

Continuentur adhuc pilulæ aloeticæ usquedum iterum plene dejiciatur alvus.

4th.—Has had farther copious, and, to appearance, natural alvine discharge, appetite still mending, and involuntary motions subsiding.

Intermittantur pilulæ aloeticæ.

A little beef-steak to dinner.

7th.—Has continued convalescent.

Pilulas aloeticas viginti quatuor.

Signa, one or two every night.

Dismissed cured.

Royal Infirmary, 5th Dec. 1804.

DAVID ANDERSON, Ætatis 8.—Is subject to violent irregular and involuntary motions of the muscles of the head, eyes, lower jaw, abdomen, both superior and inferior extremities, which attack him by fits, at intervals of two or three hours, and are from ten minutes to an hour in duration; these motions sometimes appear to be general, at other times they are confined to the head and lower jaw, producing gnashing of the teeth; at other times, to one or both of the superior

and inferior extremities; and sometimes only to the muscles of the abdomen. By account, they occasionally terminate in sopor. During sleep, the motions cease, and he commonly awakes with a scream. He is much debilitated and emaciated, complains of pain of abdomen; appetite not impaired, skin cool, pulse 120, belly by account regular.

About a month ago, he began to complain of general pains and uneasiness, with slight pain of throat and of the lower jaw; and about eight days ago was suddenly seized with a fit similar to those described above, beginning with a loud scream, and lasting about four hours; such have continued to prevail since that time.

His head has been shaved, and vinegar applied to it. Took a dose of physic, which produced several stools of a greenish appearance and fetid smell.

Habeat bolum e jalapa cum mercurio.

6th Dec.—Refused the bolus; jaw is at present fixed, and general spasm affects the body.

R. Submuriatis hydrargyri scrupulum,
Sacchari albi drachmam.

Tere intime, et divide in doses duodecim, quarum sumat unam, omni bihorio.

7th.—Trismus and spasm were of short duration; involuntary motion of the muscles of the abdomen and of the lower jaw continue; one rather costive, but pretty copious fetid and green stool; uses little food, eight powders taken.

Repetantur pulveres e submuriate hydrargyri, ut heri sumendi, usque dum iterum solvatur alvus.

Habeat juris bovini libram,
Seri vinosi libram et dimidiam, indies.

8th Dec —Irregular motions as yesterday, but trismus and spasm have not recurred ; two scanty stools, resembling those of yesterday, pulse 90, of moderate strength ; fourteen powders taken.

R. Tincturæ jalapæ unciam et dimidiam,
Syrupi drachmas sex,
Aquæ uncias duas.

Sit mistura cujus porrigatur uncia dimidia, omni hora.
Habeat cerevisiæ (*Porter*) libram, vice seri vinosi.

9th.—Alvine discharge has been scanty, and of a dark brown colour ; complains still of occasional pain of abdomen ; irregular motions in appearance nearly the same, but by account less frequent, less violent, and of shorter duration ; has taken only about half of the mixture, and nourishment is almost entirely declined ; mouth does not appear affected.

Utatur bis vel ter indies balneo tepido, et repetatur sub-
muriæ hydrargyri ut supra præscriptum.

10th.—Has had the bath twice, which he bore well ; one pretty copious, consistent, green coloured and fetid stool, seven powders taken, mouth sore with mercurial fætor, has taken more nourishment, irregular convulsive motions, as described yesterday.

Continuetur balneum tepidum, mane et vespere.

Repetatur mistura cum tinctura jalapæ, ut supra præscriptum.

11th —One dark-coloured, consistent, fetid and rather scanty stool since yesterday ; irregular motions disappeared during the whole of yesterday, and at present affect only the

muscles moving the head; pulse good, more nourishment taken, but he has refused altogether the laxative mixture.

Continuetur balneum. Intermittatur tinctura jalapæ.

12th Dec.—Has had two stools of more natural appearance, and less fetid than hitherto; irregular motions continue, but are still less frequent and less severe; spasm resembling tetanus, by account, occurred while in the bath; continues to take food, but declines the beef-tea and porter.

R. Magnesiae ustæ,
Sacchari, utriusque drachmas duas.
Aquæ uncias sex.

Sit mistura partitis vicibus indies porrigenda.

Intermittantur jusculum bovinum, cerevisia (*Porter*) et balneum tepidum.

A little beef-steak to dinner.

13th.—Has taken the mixture sparingly, and has had no stool; irregular motions confined to the muscles moving the head and lower jaw, and appear to be somewhat under command.

Repetatur mistura e magnesia, ut heri præscriptum.

14th.—Mixture, as prescribed, has been nearly taken, no stool, irregular motions as last described, mouth continues affected.

Vespere injiciantur per anum enematis domestici unciae decem.

Imponatur vesicatorium nuchæ.

R. Tincturæ jalapæ,
Aquæ, utriusque unciam,
Syrupi unciam dimidiam,
Sumat hujusce unciam dimidiam, subinde.
Intermittatur magnesia.

15th Dec.—A copious feculent alvine discharge, of more natural appearance and smell than hitherto, motions continue more moderate, and less frequent in their attack, appetite is improving, blister not yet moved.

Repetatur tinctura e jalapæ, ut heri.

16th.—A pretty copious costive, and light-coloured stool, blister answered well, mouth still affected, and irregular motions as last described.

Repetatur mistura e tinctura jalapæ, ut supra præscriptum.

17th.—A copious stool, similar to that of yesterday, irregular involuntary motions by account much declined, with improving appetite, mouth mends.

Repetatur mistura e tinctura jalapæ.

18th.—Mixture taken, a more copious and clay-coloured stool than the two former.

Repetatur tinctura jalapæ.

19th.—Alvine discharge copious, consistent, and clay-coloured, motions continue to abate, and appetite still to improve.

Continuetur mistura e tinctura jalapæ, iudies.

21st.—A stool yesterday, similar to the preceding one, none since.

*Addantur misturæ tincturæ jalapæ drachmæ duæ,
Habeat vini rubri uncias quatuor.*

22d.—A stool similar to those lately described ; irregular motions are still less frequent and violent, not without sus-

picion of their being occasionally induced at will; wine is relished.

Continuetur vinum, necnon mistura e tinctura jalapæ.

24th Dec.—Alvine discharge in abundant quantity, and now of natural appearance, irregular motions have nearly, if not altogether ceased, appetite continues good, and general health is improved.

Continuetur vinum, necnon mistura e tinctura jalapæ cum tincturæ drachmis sex tantum.

25th.—Continues convalescent; alvine discharge is abundant and natural.

27th.—Habeat tincturæ jalapæ uncias duas.

Signa, laxative tincture, from two to three spoonfuls daily.

Dismissed cured.

This case, obstinate and protracted, yielded at length to the efficacy of the purgatives; although, from the extreme puny and debile state of the child, they might have been supposed to have been improper. The danger was great, from the weakness of my patient, as well as from the violence of the symptoms; but I was not deterred from employing the only remedies that I knew could save him.

Edinburgh, 2d March, 1805.

ANNE ROSS, *Ætatis* 10 —Has a pale complexion, a dull eye, a vacant expression of countenance. After previous bad health, she had laboured, for six weeks, under involuntary motions of the muscles moving the trunk of the body, and the superior and inferior extremities, which, although slight in the beginning, had now become violent and irregular, and did not cease altogether, during sleep. She could not articulate, muscular flesh was loose, but not wasted, abdomen was hard and prominent, appetite was keener than when in health; and her belly was said to be regular.

Sumat massæ pilularum aloeticarum grana quindecim,
omni trihorio.

3d March.—Forty-five grains of the above mass taken.

One copious, consistent, dark-coloured stool.

Continuentur pilulæ aloeticæ.

Light nourishing diet to be used.

4th.—Fifty grains of the aloetic mass have been taken.

One stool, consisting of many scybala floating in a dark-coloured fetid fluid, has been passed.

Continuentur pilulæ aloeticæ.

5th.—I found the involuntary motions as described, but was informed that they had been less violent in the course of the preceding afternoon.

Swelling and hardness of abdomen somewhat subsided, a scanty alvine discharge has taken place. The stool was fluid, and approaching to the natural appearance; forty-five grains of the aloetic mass have been taken.

Continuentur pilulæ aloeticæ.

6th March.—Forty grains of the aloetic mass have been taken, one stool rather fluid, but, in respect of appearance, more natural than hitherto, appetite still keen, involuntary motions ceased last night, during sleep.

R. Gummi aloes drachmam unam,
Calomelanos,
Saponis, singulorum scrupulum unum,
Mucilaginis gummi arabicæ quantum satis sit, ut fiat massa,
quam divide in pilulas viginti æquales, quarum sumat
duas omni bihorio ad quintam vicem.

7th.—Fourteen pills taken, one copious, consistent, dark, and fetid stool, an easy night, motions suspended during sleep, are weaker and more regular this morning.

Sumat quid reliqui sit pilularum heri præscriptarum.

8th.—The six pills taken; two stools of dark colour, and in part of a clayey consistence, adhering to the sides of the containing vessel; eye is more languid, and cheeks paler than usual. She cannot as yet articulate; an easy night, without motion; mouth somewhat pained, with mercurial fetor of the breath.

R. Foliorum sennæ drachmas tres,
Cremoris tartari,
Extracti glycyrrhizæ, singulorum drachmam unam.
Infunde per horam, in aquæ fervidæ unciiis duodecim.

Sumat infusi colati quartam partem omni bihorio.
Habeat cyathum unum vel alterum vini (*Port.*) indies.

9th March.—Alvine discharge similar to the last, but more copious, a quiet night.

R. Calomelanos grana sex,
Pulveris jalapæ,
Saponis, singulorum grana decem,
Mucilaginis gummi arabici quantum satis sit, ut fiant
pilulæ sex vespere sumendæ.

R. Sodæ tartarisatæ drachmas quatuor,
Foliorum sennæ drachmas duas,
Extracti glycyrrhizæ drachmam unam,
Aquæ fervidæ uncias duodecim.
Fiat infusum, cras mane, quatuor vicibus sumendum.
Continuetur vinum.

10th.—Pills taken; vomiting succeeded the third dose of the infusion, on account of which it was intermitted. One fluid fetid dark green-coloured stool, accompanied with much flatus; fulness of abdomen more subsided, eyes more lively, and some colour in the cheek, a good night, mouth easier.

Continuetur vinum; et vespere sumat quid reliqui sit infusi.

11th.—Infusion not taken, no stool, an indifferent night. She seems, by description, to have laboured for a short time under general rigidity, and has been given to involuntary laughter; involuntary motions more violent at times, food taken.

R. Gambogiæ scrupulum unum,
Saponis grana decem,
Mucilaginis gummi arabici quantum satis sit, ut fiant
pilulæ octo.

Sumat duas omni bihorio, et vespere quid reliqui sit infusi
sennæ.
Continuetur vinum.

12th March.—Being sickened by the pills, four of them only were given, and the infusion was not given; she is much as yesterday, but the rigidity and involuntary laughter have not recurred, no stool.

R. Tincturæ jalapæ uncias duas, cujus sumat quantum capiat cochleare parvum, ex aqua, omni hora.
Continuetur vinum.

13th.—Two thirds of the tincture taken; a fluid stool, more natural than hitherto, no sickness, a quiet night, motions less frequent and less violent.

R. Calomelanos grana sex,
Pulveris jalapæ grana duodecim,
Fiat pulvis, vespere sumendus.
R. Foliorum sennæ, drachmas tres,
Extracti glycyrrhizæ drachmam.
Infunde in aquæ fervidæ uncis duodecim, quarum sumat quartam partem omni hora, cras mane.
Continuetur vinum.

14th.—A quiet night; under greater involuntary agitation than yesterday, gripes and vomiting succeeded the third dose of the infusion, a copious stool of a light-green colour, fluid and fetid.

Repetatur pulvis ut heri; et cras mane sumat quid reliqui sit infusi.
Continuetur vinum.

15th.—A copious, partly fluid, green-coloured, and highly fetid stool, slight nausea after the infusion, an indifferent night, motions continue violent, food taken.

R. Saponis,

Aloes, utriusque drachmam, formæ in pilulas triginta,
quarum sumat duas omni hora.

Habeat enema, quod domi parari solet, vespere.

Continuetur vinum.

16th March.—A better night, scanty evacuation after the injection, a copious feculent one this morning, motions less violent.

Continuetur pilulæ ut heri, et vinum.

Repetatur enema, et sumat phosphatis sodæ drachmas
duas e juscule bovino, omni trihorio.

17th.—The remaining ten pills, and an ounce and a half of the phosphat of soda have been taken; injection not well received, one scanty, feculent stool, an easy night, fulness of abdomen continues, and motions are less violent.

Sumat massæ pilularum ex aloë cum colocynthide grana
duodecim, omni trihorio.

Repetatur enema.

Continuentur phosphas sodæ et vinum.

18th.—Half a drachm of the above mass, and half an ounce of phosphas sodæ taken; injection better received, a large feculent stool, in consistence approaching to costive, has been passed, a restless night, motions less violent, and articulation at times distinct, abdomen still full.

Continuentur pilulæ, phosphas sodæ, enema, et vinum ut
heri.

Habeat tincturæ opii guttas duodecim, vespere.

19th.—One scruple of the mass of pills, and an ounce and a half of phosphas sodæ have been taken; injection retained for some time; a stool, copious as that of yesterday,

slept during the first part of the night, restless with much agitation, in the morning, but at eleven A. M. more calm, and motions less violent.

Continuentur pilulæ, phosphas sodæ, enema et vinum.
Omittatur tinctura opii.

20th March.—A restless night, involuntary motions more violent; but countenance clear, and eyes lively, fulness of abdomen continues, feculent discharge of more natural appearance, but more scanty.

Sumat tartritis potassæ et sodæ unciam unam e juscule
bovino partitis vicibus.
Omittantur enema, pilulæ ex aloe cum colocynthide, et
phosphas sodæ.

21st.—A better night, motions more staid, a copious alvine evacuation, somewhat costive, fulness of abdomen not diminished, food and wine taken.

Capiat tres pilulas ex aloe et calomelane, ut die mensis
sexta præscriptum est.
Continuentur vinum.
Repetatur tartris potassæ et sodæ, ut heri.

22d.—Nearly in the same state as yesterday.

Continuentur pilulæ, tartris potassæ et sodæ et vinum, ut
heri.

23d.—A restless night, motions more irregular and violent, a scanty and unnatural stool, fulness of abdomen continues, looks improve, but she appears to be thinner, and muscular flesh to be more flaccid.

Capiat pilulæ ex aloe et calomelane duas omni bihorio,

necnon tartritis potassæ et sodæ unciam unam, e jussu-
lo bovino partitis vicibus.

24th March.—An indifferent night, but motions more staid. Fulness of abdomen continues, a copious alvine discharge, partly of a natural, and partly of a clayey tough consistence; six pills and the Rochelle salts taken.

Sumat pilulas ex aloe et calomelane tres omni bihorio ad
tertiam vicem, necnon tartritis potassæ et sodæ un-
ciam unam, e jure bovino partitis vicibus.
Continuetur vinum.

25th.—A better night, motions more staid, cease now al-
together during sleep, articulation improves, and looks con-
tinue lively, fulness of lower abdomen unchanged, a copious
alvine discharge, feces are more natural, hard, and in de-
tached pieces, something resembling scybala.

Sumat omni bihorio massæ pilularum ex aloe et colocyn-
thide grana octo.
Repetatur tartritis potassæ et sodæ uncia una.
Continuetur vinum.
Omittantur pilulæ ex aloe et calomelane.

26th.—A good night, involuntary motions and fulness
of abdomen as last described; seventy grains of the pills,
and the Rochelle salts taken; copious fluid alvine dis-
charge.

Sumat pulveris jalapæ compositi scrupulum unum, omni
trihorio.
Repetatur tartris potassæ et sodæ, necnon vinum.
Omittantur pilulæ ex aloe et colocynthide.

27th.—Three doses of the powder, and the ounce of
Rochelle salts taken; copious evacuation of feces, of na-
tural appearance, and, for the first time, of natural form, a

good night, with much refreshing sleep; involuntary motions less violent than hitherto.

Repetatur pulvis jalapæ compositus, necnon tartris potassæ et sodæ ut heri.

Continuetur vinum.

28th March.—A good night, motions still less violent, looks are cheerful, a copious, natural and well-formed alvine discharge.

Sumat pulveris jalapæ compositi scrupulos duos ter indies, necnon tartritis potassæ et sodæ unciam et dimidiam, e jure bovino partitis vicibus.

Continuetur vinum.

29th.—Jalap and Rochelle salts taken, a quiet night, motions as yesterday; a natural, but less formed, and less copious alvine discharge.

R. Pulveris jalapæ compositi drachmas duas, in doses tres divisas,

Sumat unam statim, et alteram vespere; necnon tartritis potassæ et sodæ drachmas sex, e jure bovino, interdium.

Continuetur vinum.

30th.—In respect of sleep, motions, and alvine evacuations, as yesterday, appears to lose flesh, and looks are more wan, articulation does not improve.

R. Pulveris jalapæ drachmam unam,

Divide in doses sex, quarum sumat unam omni bihorio.

Sumat etiam tartritis potassæ et sodæ drachmas sex q̄ juscule bovino.

Continuetur vinum.

Omittatur pulvis jalapæ compositus.

31st March.—Medicines, wine, and full nourishment taken, wan looks, and enfeebled state continue; a good night, much quiet sleep, motions weaker, and more under command, than hitherto; a very copious alvine evacuation, in part costive, and not so natural in appearance as late ones.

R. Pulveris jalapæ, drachmam unam et dimidiam in doses sex divisam; sumat unam omni bihorio.
Repetatur tartris potassæ et sodæ ut supra, et continuetur vinum.

1st April.—The salts, and five doses of the powder taken, alvine discharge and symptoms as yesterday.

Repetatur pulvis jalapæ, necnon tartris potassæ et sodæ.
Continuetur vinum.

2d.—Salts and five powders taken, countenance fresh, looks lively, motions still more under command.

R. Pulveris jalapæ drachmas duas,
Divide in doses sex, sumat unam quater indies.
Repetatur tartris potassæ et sodæ.
Continuetur vinum.

3d.—The salts and five powders taken; copious, feculent, consistent, and natural alvine discharge.

Continuentur vinum et pulvis jalapæ, ut heri.
Omittatur tartris potassæ et sodæ.

4th.—Five powders taken; alvine evacuation as yesterday, a quiet night, refreshing sleep, she walks with a steady, but rather feeble gait, involuntary motions, but to no extent, of the superior extremities continue, those of the trunk of the body are gone, fulness of abdomen almost subsided.

Habeat pulveris jalapæ scrupulum unum, ter indies.
Intermittatur vinum.

Multum apricetur, cœlo, nunc temporis, benigno existente.

5th April.—Four scruples of the powder of jalap taken; sickness and slight vomiting, natural alvine evacuation, fullness of abdomen gone, motions regular and voluntary, power of articulation much recovered, looks lively; she enjoyed the open air much, and she walked a little.

Sumat omni mane, pulveris jalapæ scrupulum unum.

9th.—Eyes clear, countenance expressive of vivacity, power of articulation recovered, motions regular and voluntary, daily alvine evacuation in full quantity, stools are formed, consistent, and in all respects natural.

Sumat omni mane, pulveris jalapæ grana decem.

17th.—Finding my patient fully convalesced, the belly regular, the feces formed, and of natural appearance, I recommended exercise in the open air, and fresh vegetables in diet; and I intimated, that I ceased to take farther charge.

On the eighth day of the following month (May), I passed near to the house where my late patient, Ann Ross, lived. Curiosity led me to inquire for her. She was employed in work; she was abundantly muscular and active, and she approached me in a cheerful, playful manner.

This has proved the most protracted case of chorea, under the treatment by purgatives, that has occurred to me; which may be owing, in part, to the duration of the ail-

ment, before I saw the patient, and in part, to her sex. The strong and repeated purgatives that were given, are a proof that the constipation was great; and the almost daily alvine evacuation, and the nature of the stools, shew the accumulation of feculent matter to have been abundant and offensive. My directions in the conduct of this case, were faithfully complied with, by an anxious and sensible mother, whom I encouraged to persevere in the exhibition of purgatives by positive assurances, that a perfect recovery was to be obtained; while my little patient was enticed to compliance, by occasional presents, suited to her time of life.

Royal Infirmary, 25th April, 1805.

ELIZABETH WEBSTER, Ætatis 9.—Is subject to constant irregular and involuntary motions of both the superior and inferior extremities; but the left arm and leg appear less affected than the right. The trunk of the body is also frequently affected by these irregular motions, and there is constant grinding of the teeth during sleep, when these motions are suspended, and she appears calm and easy.

This ailment has existed for about five weeks; and since the 2d of April she has been under a regular course of purgative medicines, which have had various effects, but have given no relief of symptoms; had two spoiled teeth extracted, and on the 22d instant she passed a worm of the lumbricus kind, about ten inches in length; her appetite is good, and food is relished; her abdomen is soft, without fulness; power of articulation nearly suspended.

R. Submuriatis hydrargyri drachmam dimidiam,
Sacchari albi drachmam unam,
Optime terantur, et in pulveres decem æquales dividan-
tur.

Sumat unum omni bihorio ad quintam vicem.

R. Tartritis sodæ et potassæ drachmas sex,
Jusculi bovini libram unam.

Sit solutio partitis vicibus sorbenda.

27th April.—A rather scanty alvine evacuation, fluid, partly of natural appearance, and partly of a greenish colour, not fetid, has passed a bad night, with but little sleep; five of the powders, and about half of the beef-tea taken.

Continuetur submurias hydrargyri, ut heri.

R. Tincturæ jalapæ,
Syrupi, utriusque drachmas tres,
Aquæ unciam unam.

Sit haustus cras mane sumendus.

Intermittatur tartris sodæ et potasse.

28th.—Has had three stools, of a deep green colour, and fetid; the discharge upon the whole is scanty, has passed a better night, and this morning the involuntary motions are less general and less violent; vomiting succeeded the first dose of the mixture; five powders taken.

R. Pulveris radiceis jalapæ,
Sacchari rubri, utriusque drachmam unam,

Tere intime et divide in doses duodecim.

Sumat unam secunda vel tertia quaque hora; supra præscriptis omissis.

29th.—Has passed a quiet night, enjoying soft sleep, has had ten stools, the feces upon the whole are abundant, of a light-greenish colour, partly fluid, and partly somewhat

in separate knots, approaching in appearance to scybala; these evacuations are highly fetid, the convulsive motions are still more staid and less violent; nine powders, taken without reluctance, have been given.

Continuetur pulvis jalapæ ut heri præscriptum.

30th April.—Alvine discharge, in respect of quantity, cannot be ascertained, feces having been voided without notice in bed; but on the whole they have not been so abundant as yesterday; they are of a lighter colour and fetid; involuntary motions still less violent, appetite for food abates, thirsty, articulation still suspended, and deglutition is difficult.

*Habeat vini rubri,
Aquæ, utriusque uncias sex.
Sumat unciam, subinde.*

1st May.—Four fetid stools, but rather of more natural appearance, since yesterday; evacuation on the whole copious, has been voided without notice; abdomen seems more distended, involuntary motions still abate, pulse is feeble, and looks are rather languid, and muscular flesh apparently wasted, appetite still indifferent; eight powders taken, and wine relished.

*Habeat jusculi bovini libram et dimidiam, indies.
R. Submuriatis hydrargyri,
Sacchari, utriusque grana tria.
Sit pulvis vespere porrigendus.
Continuetur pulvis jalapæ, cujus sumat dosem, omni tri-
horio.
Repetatur vinum.*

2d.—The powder of the evening, and twelve of jalap taken; she appears more languid, and excoriations of dif-

ferent parts of the surface, and some of considerable extent, have appeared in succession for two days past; pulse at the wrist is feeble, and surface is disposed to be cold, no stool, urine passed insensibly, wine has been relished, and little food taken, has had an indifferent night, involuntary motions as last described.

R. Vini rubri uncias octo,
 Aquæ uncias sex.
 Sit mistura partitis vicibus indies sumenda.
 Inijciantur per anum enematis domestici uncia decem;
 dein accipiat per anum, omni trihorio, juris bovini uncias quatuor; in hunc finem habeat jusculi bovini libras tres; necnon fistulam armatam.
 Curentur partes excoctæ more solito.
 Intermittatur pulvis jalapæ.

3d May.—A stool previous to the injection, pretty copious, of a dark-green colour, and fetid; a smaller one after the house injection; those of beef-tea have been retained; has had a better night, and appears somewhat revived, motions as described, wine relished, and a little beef-tea has been swallowed.

R. Magnesiae ustæ drachmas duas,
 Pulveris jalapæ drachmam unam,
 Mucilaginis Gummi Arabici,
 Syrupi,
 Aquæ cinnamomi singulorum, unciam dimidiam.
 Probe mistis affunde
 Aquæ uncias quatuor cum semisse. Misturæ agitatæ
 porrigatur uncia una, ter indies.
 Continuentur vinum et jusculum bovinum, ut heri.

4th.—Three doses of the mixture taken, injections of beef-tea have been continued and retained; some beef-tea and a little food have also been taken, wine is relished;

one pretty copious green-coloured and fetid stool passed in bed, excoriations mend.

Continuentur mistura e magnesia, vinum, et enemata e jusculo bovino.

5th May.—Four stools, of a dark-green colour and fetid smell; the evacuation upon the whole has been copious, and passed in bed, spasmodic motions cease altogether at times, and again return with some violence; has passed an indifferent night, appetite mends.

Continuentur vinum, jus bovinum, et mistura e magnesia.

A night nurse.

6th.—Has passed a good night, involuntary motions as last described, with longer intervals between different attacks, appetite more improved, and excoriations more disposed to heal, four alvine evacuations, consistent, dark, and fetid; on the whole in small quantity.

R. Submuriatis hydrargyri,
Sacchari, utriusque grana sex.

Sit pulvis vespere sumendus.

Continuetur mistura e magnesia, ut supra præscriptum, addita pulveris jalapæ drachma.

Continuentur vinum et jusculum bovinum.

7th.—Has passed an easy night; irregular spasmodic motions are now but little perceived, appetite continues to improve, expression of countenance is more lively, pulse calm, and firmer than hitherto, excoriations healing, alvine evacuation of a lighter colour, less fetid, and also less copious than for some days past; calomel given, and mixture as prescribed taken.

R. Phosphatis sodæ drachmas quatuor e juris bovini unciiis sex sumendas.

Continuetur mistura e magnesia et jalapa.

Habeat vinum et jus bovinum, ut supra præscriptum est.

8th May.—Involuntary motions nearly gone, appetite good, a quiet night, sensible to the stimulus of urine and of feces; the latter has been passed in abundance, is partly fluid and feculent, partly scybalous and of a greenish colour, and still fetid; wine is relished, salts and mixture taken, as prescribed.

Repetatur phosphas sodæ.

Continuetur mistura e magnesia et jalapa, necnon vinum.

Intermittantur enemata e jusculo bovino.

9th.—Alvine evacuation more in quantity, feculent, of natural colour, with less feter, irregular motions nearly, if not altogether gone, good night, mixture, and salts, and full allowance of nourishment taken.

Habeat vini rubri uncias quatuor tantum, quibus admisceantur aquæ uncia quatuor.

Continuetur adhuc cathartica.

10th.—Involuntary motions have not recurred, deglutition is free, and she begins to articulate, stools feculent, and natural in appearance and smell.

Continuetur vinum, necnon mistura e magnesia, adempto pulvere jalapæ.

Omittatur phosphas sodæ.

11th.—The alvine discharge since yesterday is abundant, fluid, of a greenish colour, and more fetid than the last; excoriations are healed, pulse firm and regular, disposition to coldness of the surface has gradually yielded, skin now of natural heat.

R. Submuriatis hydrargyri,
Sacchari, utriusque grana quinque.
Sit pulvis cras primo mane sumendus.
Continuetur mistura e magnesia.

12th May.—A more copious and more natural stool;
continues convalescent.

Habeat omni mane pulveris radice jalapæ grana quindecim, cum totidem sacchari rubri,
Intermittantur mistura e magnesia, et vinum.

14th.—The alvine evacuation of yesterday and of this day abundant, fluid, and without peculiar fetor; pulse regular and firm, articulation not farther recovered.

Habeat pulveris jalapæ grana sex tantum, indies.

17th.—For two mornings laxative powder not given; alvine evacuation continues sufficiently copious, of natural appearance, and fluid, appetite good, but flesh and strength are slowly recovered, articulation still suspended, pulse calm, good nights.

Intermittatur pulvis jalapæ.

18th.—Pretty copious alvine discharge from six motions, more fetid than for two days past, considerable fulness of abdomen is still perceived.

R. Submuriatis hydrargyri grana quatuor,
Pulveris jalapæ,
Sacchari, utriusque grana octo.
Sit pulvis, cras primo mane, sumendus.
Habeat vini rubri uncias quatuor.

19th.—A more copious alvine evacuation, still fetid, with slight fulness of abdomen; spontaneous vomiting

of contents of stomach this morning, preceded by sickness, wine relished.

Cras mane repetatur pulvis heri præscriptus, et repetatur vinum.

20th May.—Since taking the powder, a rather scanty alvine evacuation has taken place; it is feculent, fluid, and fetid; fulness of abdomen continues, wine relished.

*R. Infusi sennæ uncias duas,
Extracti glycyrrhizæ drachmam.
Solve pro cathartico quam primum sumendo.
Vespere accipiat enematis domestici uncias duodecim.*

21st.—The infusion was taken, and the injection was soon returned, without feces; the alvine evacuation on the whole since yesterday has been copious, and fetid, and of a dark colour, with scybala intermixed; for some days she has appeared more wan, and seems to have lost in respect of flesh; the wine is relished, and food taken; no return of involuntary motions.

*R. Infusi sennæ uncias duas cum semisse,
Tincturæ jalapæ drachmas tres,
Extracti glycyrrhizæ drachmam.
Sit mistura cujus sumat unciam omni hora.
Vespere accipiat per anum, enematis fetidi uncias sex.*

22d.—The alvine evacuation, in respect of quantity and appearance, as yesterday, unless perhaps it is more of the natural colour; it contains a few scybala, and is still fetid; the injection was retained nearly five hours, when it was voided, accompanied with much flatus; pulse towards 90, and firmer, abdomen seems less distended, food and wine relished.

Repetatur infusum sennæ cum tinctura jalapæ; necnon enema fetidum vespere.

Continuetur vinum.

Omittantur alia.

23d May.—The alvine evacuation is more copious, of a darker colour, and fetid, the injection, retained four hours, was voided along with feculent matter and much flatus; fulness and tension of belly continue to abate, appetite for food flags, but wine is relished; pulse about 90, and feeble; she seems to lose in respect of flesh and strength.

Habeat quam primum juris bovini libras duas; cujus injiciantur uncix sex per anum, omni bihorio.

Sera nocte sumat bolum jalapæ compositum: et cras mane repetatur infusum sennæ cum tinctura jalapæ.

Continuetur vinum.

24th.—Alvine evacuation, since yesterday, is less copious, fluid and fetid; injections of beef-tea retained, pulse firmer, and more food taken.

Repetatur vespere enema fetidum ut supra præscriptum.

Cras mane habeat haustum ex oleo ricini.

Continuentur vinum et enemata e jusculo bovino.

25th.—A feculent stool, with much flatus, in about half an hour from receiving the injection; another since morning; on the whole, the alvine discharge is more copious, fluid, and of nearly natural colour, but fetid; appetite continues good, pulse regular and firm, fulness of abdomen more subsided; had a visit from a brother and sister, both children, in whose company she appeared delighted, and, by account, conversed with them freely and easily; in their absence she resumes her usual dulness and taciturnity.

R. Oxidi ferri nigri purificati grana sex,
Pulveris jalapæ,
Sacchari rubri, utriusque grana quatuor.
Sit pulvis, ter indies, e quovis vehiculo, sumendus.
Repetatur vinum.
Intermittantur enemata e jusculo bovino.

28th May.—The alvine discharge, from the 25th till yesterday, has been nearly as described, but rather scanty, no stool these last 24 hours, abdomen seems fuller, feebleness continues, food and wine relished.

Habeat pilulas aloeticas octo; sumat duas omni bihorio.
R. Tincturæ assæfœtidæ drachmas duas,
Aquæ tepidæ uncias octo pro enema, cras mane injiciendo, ni prius soluta fuerit alvus.
Intermittatur interea pulvis ex oxido ferri nigro.
Continuetur vinum.

29th.—Pills being taken in the course of the night, a copious, and, for the first time, formed stool was voided; the injection given, and as yet without farther effect; fulness of abdomen, and particularly of the epigastrium, continues; pulse quick, soft, and tolerably firm.

Repetantur pilulæ aloeticæ; quibus sumptis, repetatur etiam enema fœtidum.

30th.—A scanty stool in the afternoon of yesterday; six have since occurred, giving on the whole a copious feculent, fluid, and fetid discharge; the injection was returned accompanied with much flatus; fulness of abdomen continues, appetite good.

Habeat pilulas aloeticas quatuor vespere; cras mane repetatur enema fœtidum.

31st May.—Has had several stools; the evacuation on the whole copious, fluid and feculent, and without peculiar fetor; belly is less full, articulations distinct, and she has become cheerful and playful.

Habeat pilulas aloeticas tres tantum, vespere.

1st June.—Several natural stools, fulness of abdomen continues, in other respects apparently well.

Pilulas aloeticas duas tantum.
Continuetur vinum.

2d.—Repetantur pilulæ aloeticæ et vinum.

3d.—Pilulam aloeticam unam tantum, vespere.

4th.—Repetatur pilula aloetica.

5th.—Fullness of abdomen much subsided, stools natural, in all respects convalescent.

Habeat pilulam aloeticam secunda quaque nocte.
Intermittatur vinum.

8th.—Regular and natural stools, flesh and strength regained in some degree.

11th.—Has continued well.

Habeat pilulas aloeticas viginti quatuor.

Signa, one to be taken occasionally, so as a regular state of the bowels may be insured.

Dismissed cured.

This case has proved equally obstinate with that of Ann Ross; at the same time, it is one in which I had the great-

est reason to despair of success. I lost all hope more than once; and I expressed myself to this purpose to several gentlemen who were witnesses of my conduct, in order to prepare them for my failure. But the steady perseverance in the only means of safety, snatched my patient from danger, and must convince every unprejudiced person of the utility of purgative medicines in chorea.

Royal Infirmary, 3d Feb. 1806.

ELIZABETH WEBSTER, *Ætatis* 10.—For some days past she has complained of general uneasiness, and some degree of lassitude, and yesterday the muscles of her arms were observed to be agitated with irregular and involuntary motions; her looks are rather wan, her lower abdomen feels hard and prominent, and, by account, her belly has been irregular for some time past, owing to inattention from the indisposition of her grandfather, with whom she has lived since her dismissal from the Infirmary in June last; her appetite is somewhat voracious.

Habeat pilulas ex aloë et colocynthide duodecim,
Sumat duas omni bihorio, et cras mane, pilulis sumptis,
Infusi sennæ uncias duas.

4th Feb.—Pills and infusion have been taken, and as yet without effect.

R. Tartritis sodæ et potassæ drachmas quatuor,
Tincturæ sennæ compositæ unciam dimidiam,
Infusi lini uncias tres.
Sit solutio quam primum sumenda.

5th Feb.—The solution taken was followed by a pretty copious costive lumpy stool, but of natural colour, and not fetid; fulness of abdomen perceptibly less.

Habeat sera nocte submuritatis hydrargyri grana sex,
Pulveris jalapæ grana quindecim.
Cras primo mane infusi sennæ uncias tres,
Ex infusi lini uncias sex.

6th.—Only one stool, rather scanty, soft, and of natural appearance.

7th.—Has had a more copious stool, consisting partly of fluid feces, and partly detached, consistent, and rather to appearance hard lumps, in other respects feces are natural.

R. Pulveris radicis jalapæ drachmam,
Sacchari rubri drachmam dimidiam.
Tere intime et divide in doses sex, quarum sumat unam
omni trihorio.

8th.—Sickness and lassitude are abated, countenance florid and of healthy appearance; by account is more active, with less tendency to irregular motions of the right arm and leg; appetite is more natural, alvine evacuation since yesterday resembles that last described; all the powders have been taken; temporary sickness followed the exhibition of the last.

R. Aquæ uncias quinque,
Sacchari albi drachmas duas,
Tincturæ jalapæ unciam,
Sit mistura cujus sumat unciam omni bihorio.
Intermittantur pulveres jalapæ.

Animal food to dinner.

9th Feb.—Sickness and spontaneous vomiting attributed to the mixture, alvine evacuation has been less abundant, and is fluid.

Intermittatur mistura cum tinctura jalapæ.

10th.—No stool, involuntary motions apparently gone.

Habeat pilulas aloeticas tres vespere;
Cras primo mane, infusi sennæ uncias duas.

11th.—A scanty, but in other respects natural stool.

Habeat vini rubri uncias quatuor indies.
Repetantur cathartica ut heri.

12th.—Continuentur cathartica.

13th.—Alvine evacuation has been fluid, otherwise natural, and she has continued free of complaint.

R. Pulveris jalapæ drachmas quatuor, divide in doses octodecim æquales.

Laxative powders; one to be given at any time, when appearance of costiveness takes place.

Dismissed cured.

Royal Infirmary, 8th April 1811.

NELLY PARKER, Ætatis 12.—Is subject to constant irregular and involuntary motions of the muscles of the lower jaw, neck, trunk, and of both superior and inferior

extremities. Those also of the tongue are much affected, notwithstanding she can articulate pretty distinctly. In walking, the right side appears more affected than the left. She is unable to feed herself. During sleep the motions cease, and she commonly awakes with a start. She complains of no pain. Pulse is natural, her appetite and spirits are good, belly at present regular, but in general is inclined to be costive.

Two years ago, without any previous complaint, her right arm was observed to be affected with irregular motions, which, though slight at first, soon became more violent. The muscles of the face next became affected, then those of the trunk.

Variety of medicines, amongst others laxatives, were used without receiving permanent relief of symptoms. She was admitted into the clinical ward of the Infirmary about the end of June last, from which she was dismissed about the end of July following, much relieved; the right arm only being at times affected with slight irregular motions. She continued in this state till the beginning of February last, when they became more violent and frequent. Since then, they have continued gradually to increase to their present severity. She has lately used some laxative pills, but without any sensible effect.

9th April.—Alvine evacuation since admission is copious, feces partly formed, rather lumpy, and of a dark colour.

R. Pulveris radice jalapæ drachmam unam, divide in doses sex.

Sumat unam omni hora.

10th.—Powders were given. Sickness and nausea followed the two last. The alvine evacuation since yesterday

is plentiful, the feces in general soft, partly of a natural, and partly of a greenish colour, and somewhat fetid.

Habeat pilulas aloeticas viginti quatuor,
Sumat quatuor omni trihorio.
Intermittatur pulvis e jalapa.

Table broth at dinner.

11th April.—Pills have been taken, feces not over-abundant, are of dark colour, formed, but rather soft.

Intermittantur pilulæ aloeticæ.

12th.—Alvine evacuations since yesterday are scanty and scybalous.

Sumat indies pilulas aloeticas duodecim, quatuor scilicet vespere, quatuor mane, quatuor meridie.

13th.—Feces since yesterday are in moderate quantity, soft, somewhat of a clayey consistence, and of a dark colour.

Continuentur pilulæ aloeticæ.

14th.—Feces are more abundant, have peculiar fetor, and in other respects resemble those of yesterday. The involuntary motions are, on the whole, less frequent, and occasionally subside for a short space.

Continuentur pilulæ aloeticæ.

15th.—Alvine evacuation since yesterday is in moderate quantity, but feces are fluid, and of a lightish clay colour, and fetid.

Intermittantur pilulæ aloeticæ.

16th April.—Involuntary motions are reported to be still less violent. The alvine evacuation since yesterday is less abundant, soft and fetid, but of natural colour.

Repetantur pilulæ aloeticæ, ut supra præscriptum.

18th.—Since the 16th instant, the pills have been regularly given; alvine evacuation appears to have been abundant, and the feces, as diffused through the urine, to be fluid. They are peculiarly fetid. She is reported to be more staid, and the motions to be more under command. She looks well, her appetite is good.

Continuentur pilulæ aloeticæ.

20th.—The alvine evacuation of yesterday was abundant, the feces formed, and in part scybalous. They were nearly of a natural colour, but still of peculiar fætor.

The alvine evacuation of this day resembles that now described. Pills have been regularly given.

R. Carbonatis magnesiæ drachmas duas.

Aquæ fontanæ uncias quinque.

Spiritus cinnamomi seu canellæ albæ unciam unam.

Sit mistura, cujus agitatæ, sumat unciam unam ter indies.

Continuentur pilulæ aloeticæ.

22d.—Alvine evacuation of yesterday, and again that of this day, resemble nearly in all respects those last described. Appetite has abated somewhat, and she appears rather thinner than at admission. Pills and mixture have been regularly given.

Habeat jusculi bovini libram unam,
Vini domestici uncias tres indies.
Continuentur pilulæ aloeticæ, et mistura e carbonate
magnesia.

23d April.—Alvine evacuation since yesterday is copious, peculiarly fetid, and somewhat of a clay-colour and consistence; food has been taken with more relish.

Continuentur mistura e magnesia, pilulæ aloeticæ,
Jusculum bovinum et vinum.

25th.—Alvine evacuation, in respect of quantity, consistence, and smell, resembles that last described. Appetite is recovered, and, in the comparison, the involuntary motions since the 18th have become more staid, and more under command. The medicines have been regularly given.

Continuentur medicamenta.

26th.—The alvine evacuation since yesterday is less abundant, soft, and of a light clay colour, and more peculiarly fetid than of late. She has complained of sickness and thirst; these have now subsided, but the abdomen is more full and tense than usual. Tongue clean, pulse calm, looks are good.

R. Infusi sennæ uncias duas,
Tincturæ sennæ compositæ drachmas duas,
Sit mistura quam primum sumenda.
Continuentur pilulæ et mistura e magnesia.

27th.—Has had return of sickness, with passing gripes and slight vomiting. The alvine evacuation pretty copious, soft, of a light clay colour, and peculiarly offensive smell.

The motions are more staid than they have hitherto been observed, and articulation is more distinct.

Continuetur vinum.

Omittantur medicamenta.

28th April.—No return of sickness, gripes, or vomiting. She has had alvine evacuation, feces are less abundant, and less fetid; they are, in part, of usual form, and of more natural bilious colour.

Repetatur mistura e carbonate magnesix.

29th.—The alvine evacuation is abundant, formed, and of more natural colour. Appetite is good, and looks again improved.

Continuetur mistura e carbonate magnesix.

30th.—Alvine evacuation is more abundant, more fetid, more of a clay colour, and softer than that of yesterday.

Sumat omni mane,

Pulveris radices rhei grana duodecim.

Continuetur mistura e carbonate magnesix.

1st May.—Feces in natural quantity, are nearly of natural appearance, but soft, with little of peculiar fetor.

Repetatur pulvis rhei.

Continuetur mistura e magnesia.

2d.—Feces since yesterday more than usually abundant, have little or no peculiar fetor, and although not formed, are consistent.

Continuentur medicamenta.

4th May.—Alvine evacuation of yesterday was less abundant and soft : that of this morning is more abundant, lumpy, and fetid. She has complained of gripes.

Habeat vespere pilulas aloeticas quatuor.

Continuentur pulvis rhei, et mistura e carbonate magnesiæ.

5th.—The feces since yesterday are abundant, lumpy, and fetid.

Omittantur pilulæ aloeticæ.

Continuentur alia.

6th.—Alvine evacuation is less abundant, feces are soft and dark-coloured.

Continuetur pulvis rhei, necnon mistura e magnesia, cujus sumat uncias duas pro dosi.

7th.—Feces since yesterday are nearly of natural quantity and appearance, formed, and less fetid.

Continuentur pulvis rhei, et mistura e magnesia, ut heri.

8th.—Feces since yesterday are more abundant, soft, and of a clay colour.

R. Pulveris radicis rhei grana duodecim,

Pulveris ipecacuanhæ granum unum.

Sit pulvis omni mane sumendus horam circiter undecimam.

Intermittatur vinum.

Mistura e magnesia, et pulvis ut prius præscriptum.

9th May.—Feces since yesterday are copious, of a light clay colour and doughy consistence, and peculiarly fetid; slight sickness from the powder this morning.

Continuetur pulvis rhei cum ipecacuanha.

10th.—Alvine evacuation is rather less copious, but in other respects similar to the last. Has complained less of sickness.

Repetatur pulvis rhei cum ipecacuanha.

11th.—Alvine evacuation abundant, feces are formed, and have little peculiar fetor. The involuntary motions since the report on the 27th of April have been observed to be still more under command. They are, however, in general, more violent before breakfast.

Continuetur pulvis rhei cum ipecacuanha.

12th.—Feces since yesterday are copious, chiefly formed and lumpy.

Repetatur pulvis rhei cum ipecacuanha.

13th.—Alvine evacuation is abundant, soft, and fetid; slight sickness after the powder.

Continuetur pulvis rhei cum ipecacuanha.

14th.—No sickness. Feces resemble those last reported.

Continuetur pulvis.

15th May.—She has not again complained of sickness; feces since yesterday are in moderate quantity, soft, and still fetid.

Continuetur pulvis rhei cum ipecacuanha.

16th.—Alvine evacuation not over-abundant, feces are soft, and rather fluid. Spontaneous vomiting since morning.

Intermittatur pulvis rhei cum ipecacuanha.

17th.—The alvine evacuation since yesterday is copious, for the most part of doughy consistence, dark-coloured, and fetid. Abdomen of late of a natural size; is this morning unusually distended. Appetite throughout has been good.

18th.—Feces since yesterday are in moderate quantity, are soft, dark-coloured, but with less of peculiar fetor. Unusual turgescence of abdomen gone.

19th.—Feces since yesterday are formed, and in other respects natural.

Progress towards amendment, in respect of involuntary motions, has within these last two weeks been considerable. By the report of her father, who has not seen her since her admission, this amendment is marked.

20th.—Appetite somewhat impaired for two days. Alvine evacuation in natural quantity; feces are rather hard and dark-coloured.

R. Pulveris radidis rhei grana sex,
Ipecacuanhæ granum unum.
Sit pulvis omni mane hora undecima sumendus.

21st May.—Feces more copious, of peculiar fetor, in detached pieces, and somewhat scybalous.

Continuetur pulvis.

23d.—The alvine evacuation of yesterday, and of this day, has been pretty copious. The feces of the former were soft, and of doughy consistence; those of this morning more consistent and formed. Both have had peculiar fetor. She has complained to-day of passing headach and sickness.

Habeat pilulas aloeticas duodecim,
Sumat tres omni trihorio.
Intermittatur pulvis rhei cum ipecacuanha.

24th.—Copious evacuation of lumpy and fetid feces.

Repetantur pilulæ aloeticæ.

25th.—Feces since yesterday are less abundant, soft, and still fetid.

Continuentur pilulæ aloeticæ.

26th.—Feces abundant, soft, dark-coloured, and fetid. She has complained of thirst, appetite somewhat impaired, and was observed in the course of last night to have disturbed sleep.

Intermittantur pilulæ aloeticæ.

27th May.—Headach, sickness, and thirst gone, a quiet night; feces are abundant, in part soft, and partly formed.

Habeat sulphuris sublimati loti drachmam unam, e lactis bovine uncias duabus, omni mane.

28th.—Feces since yesterday are of natural consistence and quantity.

Repetatur sulphur sublimatum.

30th.—Alvine evacuation since the 28th has been, on the whole, nearly in natural quantity. That since yesterday consists of feces of doughy consistence, and peculiarly fetid.

Habeat sulphuris sublimati sesquidrachmam.

June 2d.—Daily alvine evacuation since last report has been abundant, of doughy consistence, and of a light colour, but any peculiar fetor that may attach is not perceived, owing to the odour of sulphureous gas.

Continuetur sulphur sublimatum.

5th.—Feces evacuated daily nearly resemble those mentioned in last report; but these of this day are in part lumpy.

R. Foliorum sennæ drachmam unam,

Tartritis potassæ et sodæ drachmas quinque.

Extracti glycyrrhizæ glabræ drachmam unam, aquæ fer-
vidæ uncias sex.

Sit infusum colandum et cras mane sumendum.

Intermittatur sulphur sublimatum.

th. —Feces are in full quantity, and rather fluid.

Repetatur solutio.

7th June.—Feces voided since yesterday are soft, but somewhat consistent, of a dark colour, and fetid. She has had passing gripes and sickness. Abdomen is at times more turgid, and again more flaccid and soft. Food is taken.

Habeat pilulas aloeticas duas vespere, et repetatur solutio cum senna cras mane.

8th.—Has had neither gripes nor sickness. Alvine evacuation is abundant; feces in general are soft, and in part lumpy, of more natural colour and odour than of late.

*Habeat pilulas aloeticas duas vespere.
Repetatur solutio cum senna cras mane.*

9th.—The progress towards amendment, with some slight interruptions, has continued pretty uniform. She has now acquired the full command of the affected muscles; has had sickness and vomiting since morning. The feces, since yesterday not over-abundant, are lumpy, and rather hard. Appetite is good.

*Habeat mane, meridie, et sera nocte, pulveris radicis jalapæ grana duodecim.
Intermittantur pilulæ aloeticæ, et solutio cum senna.*

11th.—Having been sickened by the morning dose, the powder was not repeated till this day. She has had plentiful evacuation of natural feces.

Habeat pulveris jalapæ grana octo, semel tantum indies, meridie scilicet.

14th June.—Irregular motions, gradually subsiding since the report of the 9th, are now nearly, if not altogether gone; her appetite is natural, and her looks are good. Feces natural, except that they are somewhat abundant and soft.

Habeat pulveris radicis jalapæ grana quatuor, tantum, semel indies.

18th.—Bowels have continued regular. Irregular motions, but to no great extent, casually recur.

R. Pulveris radicis jalapæ drachmas duas,
Divide in doses octodecim.

Signa, aperient powders, one to be given, if at any time tendency to constipation appears.

Recommended to use moderate exercise in the open air.

Dismissed relieved.

I saw Nelly Parker about six weeks after she left the Hospital. Her looks and appearance, now those of perfect health, might have justified my taking the merit of having accomplished a complete cure, even when she passed from under my immediate care; but I was anxious not to weaken the proof which this case afforded of the efficacy of purgatives in protracted chorea, by seeming to presume too much on my success. I enjoined the mother of the girl, who accompanied her in this visit to me, to pay solicitous attention to the state of the alvine discharge, and when defective, to promote it by medicine: a circumstance on which, I strongly inculcated, her future comfort and happiness depended.

SECT. II.

LETTER FROM DR HOME, ADDRESSED TO THE AUTHOR.

Edinburgh, 11th Oct. 1805.

DEAR SIR,

I HAVE heard with great pleasure, that you are now publishing an account of the good effects of purgatives, in the cure of some diseases. I take the liberty of sending you, therefore, an abstract of two cases of chorea, which occurred in the clinical ward, and which shew, in a very striking manner, the good effects of purgatives in the cure of this disease. To these cases you are certainly well entitled, because, as this mode of curing chorea was entirely new to me, and contrary to my opinion of the nature of the disease, the treatment of these cases, was, if you recollect, entirely conducted upon your suggestion. I intended also to have sent you a very remarkable history of the good effects of purgatives, in a very bad case of typhus, in which they were employed at your suggestion, but unluckily I cannot at present find it.—I am,

Dear Sir,

Your most obedient Servant,

To Dr JAMES HAMILTON, }
Physician, Edinburgh, }

JAMES HOME.

MARGARET JAMESON, was admitted into the clinical ward, upon the 10th of May, 1804. She was sixteen years of age, and of a sanguine temperament. About three months ago, previous to which she had been in good health, some involuntary motions were first observed in her left arm and leg. These, about a fortnight ago, changed to the right side. At present, these involuntary motions are so considerable, that she can hardly walk, and cannot feed herself. They cease during sleep, which, however, is much disturbed. Pulse 84, tongue clean, appetite impaired, thirst considerable, belly costive. The menses have appeared once only, and in small quantity, about a month ago. She had used a great variety of remedies, of the nature of which she was ignorant, without receiving any benefit.

A compound, consisting of the submuriate of mercury and of jalap, at first in the proportion of three grains of the former, and ten grains of the latter, was given. This, however, producing no effects, the quantity of the submuriate of mercury was increased to five grains, and that of the jalap, to fifteen grains. It was repeated four times in eight days. It never operated above four times. The feces were at first natural: they afterwards became black and fetid; and then again assumed a natural appearance. The involuntary motions gradually became better: they ceased altogether in eight days; and on the tenth day, she was dismissed cured. As the cure, however, might have been temporary only, she was desired to return frequently to the Infirmary. But, although she presented herself often, she remained entirely free of the disease; and her countenance exhibited the appearance of health and vigour.

MARY MURRAY, aged 15, and of a delicate, irritable habit, was admitted on the 8th of June 1804. In her, the disease had commenced about three months before, with pains in her legs and arms. These pains she ascribed to cold, and they were removed by laxatives, and external applications. After this, involuntary motions gradually came on, at first in the right leg, and then in other parts. At the time she was admitted, the muscles of the head, of the lower jaw, of both superior extremities, and of the right leg, were affected, so that she could hardly walk; she could not feed herself; and could not speak intelligibly. She was affected also with frequent headaches; with great imbecility of the mental faculties; with frequent fits of crying, without any evident cause; and with swelling of the abdomen, towards evening. Pulse about 80, tongue clean, appetite good, belly very bound. The menses had never appeared.

To this patient, five grains of the submuriate of mercury, and fifteen grains of jalap, were given in the form of bolus, every day, for fourteen days. After this, they were given every second day only, for six days. During these three weeks, this medicine had the effect of producing three or four stools every day. At first, the stools were of a natural appearance; afterwards they became black, and very fetid; gradually, however, they assumed a natural appearance. During this time, she became stronger. Her countenance assumed a healthy appearance, and the involuntary motions gradually diminished, so that she was able to walk more steadily, to carry liquids to her mouth, and to speak more distinctly.

As the progress of the cure appeared to be slow, a compound, consisting of equal parts of the *cinchona officinalis*,

and of the valeriana silvestris, was given in the quantity of half a drachm twice a-day. At the same time, the above purgative was occasionally prescribed, whenever there was any tendency to costiveness, or when the stools were not of a natural appearance. Under this plan, which continued three weeks, this patient gradually got better, so that when she was dismissed, after having continued in the Infirmary about six weeks, the involuntary motions had entirely ceased, and she was in perfect health.

I have had favourable accounts of the efficacy of purgatives in chorea from Dr Freer, Professor of the Practice of Physic in the University of Glasgow, from Dr Rhind, Physician in Stirling, and from Dr Wightman, Physician in Dunbar: This last gentleman, in a letter of date 9th of January, 1806, addressed to me, *inter alia* thus expresses himself: "I have derived considerable instruction from your late valuable treatise on the use of purgative medicines in different diseases. I have been successful in curing a very obstinate case of chorea by this mode; it required a prosecution of the course for about six weeks, and had it not been for the encouragement which you held out in the cases you detail, I frankly acknowledge I should have abandoned it, before the cure was completed.



APPENDIX VIII.

HYSTERIA.

SECT. I.

CASES OF PATIENTS WHO LABOURED UNDER HYSTERIA, EXTRACTED FROM THE RECORDS OF THE ROYAL INFIRMARY.

Royal Infirmary, 12th Sept. 1803.

JEAN DOUGALD, *Ætatis* 45.—Seven days ago, was attacked with pain of abdomen, borborygmi, and the sense of a ball moving up towards her throat, occasioning the feeling of suffocation, after which she became insensible, and continued in that state for some time; on recovering she had frequent eructations of flatus. Since that time, she has had several fits of the same kind. Pulse about 70, belly costive, catamenia have ceased.

Habeat bolum e jalapa cum mercurio.

12th Sept.—One costive stool.

Repetatur bolus e jalapa cum mercurio.

13th.—One stool more fluid and natural, pain of abdomen, eructations, and hysteric symptoms have not returned.

Repetatur bolus e jalapa cum mercurio.

14th.—Sumat indies solutionis assæfœtidæ unciam dimidiam, ad tertiam vicem.

23d.—Belly has been regular, stomachic symptoms have not returned.

R.—Tincturæ assæfœtidæ uncias duas.

Signa, fifteen drops twice a-day in a glass of water.

Dismissed cured.

Royal Infirmary, 16th March, 1805.

JEAN LAWRIE, Ætatis 17.—Is subject to violent involuntary and irregular motions of the trunk and extremities, which generally last from five to ten minutes, and sometimes return several times successively, without any apparent cause. Complains of severe headach during the intervals, and flying pains in her loins, breast, and extremities. Pulse at present 104 and weak, face flushed, skin hot, alternating with a sense of cold, belly rather bound;

catamenia, which were suppressed for upwards of four months, returned about eight days ago.

Was seized yesterday, while walking, with pains in the breast and back, faintness and difficulty of respiration. These continued for about half an hour, and were succeeded by a fit, as above described. Has been subject to headach, vertigo, and stomach complaints, for about three years.

Habeat quam primum bolum jalapæ compositum, et post horas quatuor, ni prius alvus deiciatur, enema domesticum.

17th March.—One costive, but in other respects natural stool; tongue clean, pulse calm; headach continues, with flushings of face, three attacks of spasmodic affection, as described, but in a slight degree, since admission; has passed an easy night.

Habeat pilulas ex aloe et colocynthide duas, quarta quaque hora usquedum fluat alvus.

18th.—Twelve pills taken, no stools procured, headach is relieved, one fit of short duration, resembling hysteria.

Habeat quam primum enema purgans; et cras primo mane bolum jalapæ compositum, cum calomelanos granis octo.

19th.—Several copious dark and fetid stools after the injection, none since the bolus of this morning; headach is relieved, no return of paroxysm.

Repetatur enema purgans quam primum.

20th March.—Two slight fits, several stools.

Repetatur bolus jalapæ compositus cras mane.

21st.—No recurrence of fits; pain under the sternum, increased by the recumbent posture, continues; headach gone, free passage of belly, pulse calm.

Imponatur vesicatorium sterno qua dolet.

23d.—Blister has risen well, and pain is relieved, no stool, no recurrence of fit.

Cras mane repetatur bolus jalapæ compositus.

25th.—Has had full passage of belly; free of ailment.

Pilulas ex aloë et gambogia octodecim.

Signa, one or two occasionally, at bed-time.

Dismissed cured.

Royal Infirmary, 2d Jan. 1806.

ISABELLA BLACK, *Ætatis* 18.—Complains of severe pain at the scrobiculus cordis, slight headach and nausea, with passing sickness; she describes the pain as if the sides of the chest were drawn together, which, continuing for some time, relaxes, and she has considerable ease for a few minutes, when the pain returns with the same uneasy

feeling; pulse about 80 and full, tongue white, belly slow. This affection came on suddenly about five hours ago, when carrying water up a stair, but says she has been subject to similar attacks for some time.

Bolus jalapæ compositum.

3d Jan.—As yet no stool.

Habeat quam primum haustum ex oleo ricini, cum olei uncia.

Vespere si opus sit enema domesticum.

4th.—Headach and sickness, gastrodynia, with sense of drawing or tightness, are abated; one return only of spontaneous vomiting; pulse calm, tongue clean, three copious stools of natural appearance, but fetid smell; an easy night.

Habeat pilulas aloeticas octodecim, sumat tres omni trihorio usquedum iterum exoneretur alvus.

6th.—During the night betwixt the 4th and 5th, she complained more of gastrodynia, and she had several attacks of syncope, with feeling of occasional globus. All these symptoms continued to distress her in the course of yesterday. The pills last prescribed having been taken without effect, the following solution was given.

*R. Infusi sennæ uncias quatuor,
Tartritis potassæ et sodæ unciam cum semisse,
Infusi lini uncias octo.
Misce.*

She passed an uneasy night, but has been free of ailment

since morning. Copious dark-coloured and fetid alvine discharge has been procured.

Habeat pilulas aloeticas sex.

Cras primo mane infusi sennæ uncias tres, ex infusi lini unciis sex.

7th Jan.—No stool. Infusion not given, no ailment.

Habeat quam primum infusum sennæ ut heri prescriptum.

8th.—Has had free passage of belly.

Habeat pilulas ex aloë et colocynthide duodecim.

Signa, purgative pills, one or two at bed-time.

Dismissed cured.

Royal Infirmary, 25th Jan. 1806.

SARAH MACMILLAN, Ætatis 14.—On the afternoon of the 23d instant, she was suddenly seized with sickness and fainting, and remained for some time in a state of insensibility, when she began to laugh, cry, and scream alternately, and the whole body became agitated with violent convulsive motions; in the course of three hours she became calm, and seemed to fall into a sleep, but was observed to sob and sigh much; when she awoke, she complained of headach, and an uneasy feeling about the præcordia. Yesterday she was again attacked in a similar manner, but the paroxysm was preceded by borborygmi and globus, and during the whole of last night the fits were almost constant;

pulse at present 66, tongue white, belly said to be rather slow; she complains of severe headach and pain of loins; catamenia appeared for the first time about ten months ago, and have been regular and are now present. During the first paroxysm she took a draught containing camphor, but without relief.

Habeat statim, bolum jalapæ compositum.
Cras mane infusi sennæ uncias tres.

26th Jan.—Previous to the exhibition of the infusion of senna, a large, costive, dark-coloured stool took place; passed an easy night, without farther attack of hysteric paroxysm; the last occurred yesterday about one o'clock after-noon.

Sera nocte repetatur bolus jalapæ compositus, cum mercurii granis decem.
Repetatur cras mane infusum sennæ.

27th.—Repeated and severe hysteric paroxysms in the course of last evening; complains of headach, eyes appear dull, pulse about 80 and soft, no alvine evacuation since the exhibition of the bolus and infusion of senna; after the cessation of the paroxysms she passed an easy night; fluunt catamenia.

Habeat quam primum enema purgans.
Habeat pilulas aloeticas octodecim, sumat tres omni trihorio.
Pilulis sumptis, et quadrihorio exacto, repetatur enema purgans, ni plene prius exoneretur alvus.
Applicentur hirudines quatuor utrique tempori.

28th.—Complains still of headach, but eyes are less heavy, pulse calm, no return of hysteric paroxysm; she has

passed an easy night, some food taken; injection of last evening was followed by copious alvine evacuation at different motions; the first feces appeared costive, the latter were less so, but formed, the whole of a dark colour and fetid; the pills have been taken without farther effect; leeches did not succeed well.

Repetantur omnia ut heri.

29th Jan.—Alvine evacuation since yesterday sufficiently abundant, of a whitish colour, and seemingly of a clayish consistence; headach gone, eyes are lively; two slight hysteric paroxysms last evening.

Sera nocte habeat bolum jalapæ compositum, cum mercurii granis octo.

Cras mane haustum ex oleo ricini, cum olei drachmis duodecim.

30th.—No return of hysteric paroxysm; alvine evacuation plentiful, somewhat scybalous, otherwise natural.

Habeat omni mane pulveris jalapæ compositi drachnam.

1st Feb.—As yet no stool. Catamenia pridie defluerunt.

Habeat quam primum infusi sennæ uncias quatuor.

Vespere pilulas aloeticas quatuor.

Cras mane repetatur pulvis jalapæ compositus.

2d.—Pretty full alvine evacuation, feces consistent, formed, and nearly of natural appearance; free of ailment.

Habeat pulveris radicis jalapæ unciam dimidiam, divisam
in doses octo.

Signa, laxative powders, one every morning.

3d Feb.—Dismissed cured.

SECT. II.

LETTER FROM MR JAMES LAW, SURGEON IN EDINBURGH,
ADDRESSED TO THE AUTHOR.

DEAR SIR,

SOON after the second edition of your publication appeared, I had occasion to treat a case of hysteria agreeable to your views. The circumstances of the case, and of the cure, seem so strongly marked in favour of the treatment which you recommend, that I cannot refrain from giving you a short account of it.

About the middle of last September, Miss E. R. applied to me for my advice in certain nervous complaints, under which she had laboured for about six years.

They had begun about the age of fourteen, when the menstrual discharge first threatened to appear.

Lassitude, loss of appetite, diminution of strength, wasting of flesh, a pallid look, and dulness of spirit, with frequent violent hysteric paroxysms (sometimes two or three of these in a day) were the symptoms most prominent at the time when she applied to me. Her bowels were habitually and obstinately costive, but the menstrual discharge was pretty regular.

At the commencement of her illness, she had fainting fits only, which did not occur at first oftener than once a-month, and about the period of menstruation. Gradually they became more frequent, occurring once in a fortnight, and once in eight days, till at last they came to attack her several times a-day, and in July last, took the marked form of violent hysteria.

Before I saw her, she had consulted various respectable practitioners in the north of England, where she resided, and had used a great number of medicines, of which she could give no account, except, that one which she took by tea-spoonfuls made her very heavy and stupid, and that she knew she had taken a great deal of valerian and assafoetida.

She had been advised to come here to use the warm baths at Portobello, the cold sea-bathing having previously failed in relieving her.

I resolved to attempt the cure in your method, and gave her the *pilulæ rhei compositæ* in such doses, and at such short intervals, as might effectually evacuate the contents of the intestines. As she lived at Portobello, in the vicinity of Edinburgh, I gave her mother strict injunctions to examine the *egesta*, and to bring me a particular account of their appearance.

From five to eight pills brought off, by account, a great load of fetid, dark-coloured, hardened feces.

She was directed to continue the pills, two every night, which she did for some time.

Her bowels now became more easily moved, and one pill every night, or even one in two or three nights, has been sufficient to regulate the alvine discharge.

The result has been that, from the first effect of the purgative medicine, she has not had the slightest attack of hysteria, except once, and that no more than a threatening, occasioned by fatigue and overheating herself.

She has recovered her appetite, her strength, flesh, and colour; and, from being dull and inanimate, has become lively and in good spirits.

Being in the neighbourhood of the baths, she has taken the tepid sea-bath four times; but I cannot ascribe her cure in any degree to this, as she did not use it till some time after the hysteric fits had disappeared.—I am,

Dear Sir,

Yours truly,

JAMES LAW.

Edinburgh, 30th Dec. 1806.

Dr HAMILTON.

APPENDIX IX.

TETANUS.

SECT. I.

CASES OF PATIENTS WHO LABOURED UNDER TETANUS,
EXTRACTED FROM THE RECORDS OF THE ROYAL INFIRMARY.

Royal Infirmary, 27th Aug. 1805.

DAVID M'KENZIE, Ætatis 66.—Complains of most excruciating pains in his legs, thighs, and arms, and about the scrobiculus cordis; the muscles of his legs and thighs feel hard and contracted, and are frequently agitated by violent, irregular, and involuntary motions. The muscles of the thorax and abdomen are occasionally affected with the same involuntary motions, giving a sense of suffocation, and severe pain. Has sometimes a difficulty in swallowing; pulse 90, weak and hard, features much shrunk, tongue foul, complains of constant purging, with gripes; is unable to articulate but in a low whisper.

Says, that last night, about twelve o'clock, when asleep, he was roused with severe pain in his legs; they were contracted, and he was unable to stretch them out. In about an hour, the pain became easier, and he could move them a little, but the pains and spasm have continued to recur every half hour since.

Injiciatur quam primum enema anodynum, cui addantur tincturæ opii guttæ octoginta.

28th Aug.—Last night, about the time he was first seized, the spasmodic action became very violent. The muscles of his legs were much agitated, and contracted, and the knees drawn up towards the abdomen; he was unable to speak or move; the injection, which was given about two hours before, was retained only a few minutes.

R. Camphoræ grana decem,
Sacchari drachmas duas, tere et adde
Mucilaginis mimosæ niloticæ drachmam dimidiam,
Aquæ unciam.
Sit haustus statim sumendus.

28th.—Noon. Since the exhibition of the draught, he has been quiet, and slept some; the spasmodic action of the muscles of the lower extremities has recurred, but not so severely; complains still of pain about the scrobiculus cordis, thirst urgent, diarrhœa continues; has passed only about four ounces of urine since admission.

Continuetur haustus e camphora.

R. Tartritis sodæ et potassæ drachmas sex,
Infusi sennæ uncias duas,
Aquæ unicas sex;
Sit solutio statim sumenda.
Habeat vini rubri uncias octo.

29th Aug.—Paucity of urine, and prevalence of diarrhœa; the stools were scanty, white-coloured, and fetid; since the exhibition of the cathartic, a very copious alvine evacuation has taken place; it is fluid, of a mixed greenish and clayish colour, of a somewhat acid smell, and otherwise of a peculiar fetor.

Two camphor draughts have been given, and wine has been used; pulse is less hard, cramps of the lower extremities occasionally recur since morning, but the involuntary action of other muscles has ceased; countenance lightened; he has enjoyed some sleep.

Repetatur quam primum solutio cathartica, qua sumpta, et horis quatuor elapsis, accipiat enema purgans, alvo reddita, habeat haustum cum tincturæ opii guttis quadraginta.

Habeat juris bovini libras duas.

Repetatur vinum.

Intermittatur haustus cum camphora.

30th.—Injection given was soon returned; he has had very copious alvine evacuation, fluid, of a dark-green colour, and of a high and peculiar fetor; pain of epigastrium gone; two slight attacks of spasm of the lower extremities last night, no other irregular muscular action has occurred; tongue clean and moist, pulse feeble; a peculiar fulness, and general tension of abdomen is perceived; wine has been relished, and he has passed a good night.

Habeat pilulas aloeticas duodecim; sumat tres omni bishorio; hisce sumptis, habeat enema domesticum, nā prius exoneretur alvus.

Repetantur vinum et haustus anodynus.

31st Aug.—Pills and injection given; feculent discharge less copious than yesterday, and less fetid; is of a clay-colour, partly fluid, and partly scybalous. Fullness and tension of abdomen gone; a slight return of spasm of the lower extremities was of short duration; surface inclines to be cold, pulse feeble, drowsy, with pain across the forehead; pills taken.

*Foveantur crura tertia quaque hora, semihoræ spatium.
Continuentur jusculum bovinum et vinum.
Omittatur haustus anodynus.*

1st Sept.—Has had further alvine evacuation, fluid, of a more natural appearance, without fetor or scybala, spasmodic affection has once appeared, and has been slight; surface warm, pulse firmer, painful affection of both eyes, headach and drowsiness gone.

*Abluat oculos solutione sulphatis zinci subinde.
Habeat cras mane pulveris jalapæ compositi scrupulos duos.
Continuetur vinum.*

2d.—Pain and inflammation of eyes are relieved, one short and slight return of cramp of the lower extremities, countenance has a more natural and more lively appearance, appetite improving, no stool.

*Repetatur quam primum pulvis jalapæ compositus, et vespere, si opus sit, accipiat enema domesticum.
Repetatur vinum.*

3d.—Has passed an indifferent night; has had longer and more severe attack of cramp in the lower extremities; a costive, green, and fetid stool followed the injection, when

previous uneasiness subsided. He appears more languid, but pulse continues firmer, and surface warm, tongue clean, appetite declines.

Habeat infusi semuæ uncias sex.
 Unciam quam primum omni hora repetendam.
 Infuso sumpto, accipiat iterum enema domesticum.
 Repetatur vinum.

4th Sept.—No return of spasmodic affection; has used more food, affection of eyes gone, and looks are improved; has had copious alvine evacuation, and more natural than hitherto, after receiving the injection, the infusion having been previously taken; complains of gripes.

R. Mucilaginis mimosæ niloticæ unciam dimidiam,
 Magnesiae drachmas duas,
 Pulveris jalapæ drachmam.
 Probe mistis affunde aquæ uncias sex.
 Misturæ agitatae sumat unciam, secunda vel tertia quaque hora.
 Habeat vini rubri libram indies.

5th.—Fluid and natural alvine evacuation in full quantity; gripes continue.

Sumat dosim misturæ c magnesia, quarta quaque hora.
 Pilulam thebaicam vespere.
 Repetatur vinum.

7th.—Gripes are gone, spasms have not recurred, alvine evacuation natural and plentiful, appetite good.

Intermittantur medicamenta et vinum.

9th.—Belly rather open.

Habeat aquæ calcis uncias tres, quater indies.

13th Sept.—Belly has been regular.

Dismissed cured.

In this case the early exhibition of camphor was accidental; and the use of it was speedily relinquished. I ordered laudanum in compliance with common custom; but we may learn, from the report of the 1st September, that it was given with no good effect. The small quantity of wine which I prescribed, respected the general debility and exhausted state of the poor patient, suffering under a painful disease; I did not view it in the light of a medicine operating towards a cure, which I conceive to have been effected by the purgative medicines alone.

Royal Infirmary, 2d Nov. 1805.

ALEXANDER BULLER, *Ætatis 35.*—Twice in the course of last night, and once since morning he has been affected with a violent spasmodic action of the muscles of the thorax and lower extremities, during the continuance of which he was unable to speak or move, and breathed with much difficulty. The muscles of the extremities felt like stretched cords, with several small knots in different parts. There were also two lumps near the scrobiculus cordis, evidently formed by the contraction of the muscles; these lumps on the chest were only of momen-

tary duration, but returned frequently for the space of five or six minutes. The affection of the extremities was stationary for that period; he complains of constant pain in his arms and shoulders, impeding the free motion of the joints, and after each attack of the cramp he had frequent flatulent eructations; pulse quick and sharp, tongue foul, belly very costive.

Has been in the house for about a month for a slight venereal affection, for which he used mercury in the form of ointment; the chancres have healed, and his mouth, which was affected, is now quite well. As he complained of costiveness, he was ordered yesterday, previous to the present complaints, a drachm of the compound powder of jalap, and in the course of the night he had three fetid, dark-coloured and costive stools.

R: Infusi sennæ uncias quinque,
Tincturæ sennæ compositæ unciam,
Infusi lini uncias sex.

Sit mistura cujus sumat uncias tres omni hora, usquedum fluat alvus, et vespere ni plene alvus soluta fuerit accipiat enema purgans.

3d Nov.—One slight attack of pain of breast, with affected respiration as described, and also of the left lower extremity; no farther recurrence of spasmodic affection; pain of superior extremity continues, with swelling of left wrist since yesterday; pulse quick and full; infusion being given, a copious costive light-coloured stool ensued; injection having been also given, was followed by a fluid dark-coloured alvine evacuation.

R. Haustum ex oleo ricini, cum olei uncia,
Tincturæ sennæ compositæ unciam.

Sit mistura statim porrigenda, et vespere si opus sit, repetatur enema purgans.

Applicentur hirudines quatuor metacarpo dolenti.

4th Nov.—No return of spasm, wrist less pained, tongue clean, pulse calm; has had full alvine evacuation; little or no food taken.

Habeat juris bovini libram,
Cerevisiæ tenuis libras duas vel tres indies.

5th.—Spasmodic affection, with oppressed breathing and general uneasiness of the muscles of the abdomen yesterday evening. This attack continued only for a few minutes, but left him for a considerable time sick and faint; pain of left wrist is gone, pain of right arm and of right wrist has supervened; pulse calm, a dark-coloured stool in the course of the evening.

Habeat quam primum pilulas ex aloe et colocynthide duodecim.

Sumat tres omni bihorio.

R. Infusi sennæ uncias quatuor,

Infusi lini uncias sex.

Sit mistura, pilulis sumptis, duabus vicibus porrigenda.

6th.—Pain and swelling of right wrist continue, spasmodic affection has not recurred, pulse about 70 and soft, copious, fluid, and fetid alvine discharge; a bad night.

Applicentur hirudines quatuor carpo dolenti.

Habeat haustum anodynum vespere.

Cras mane haustum ex oleo ricini, cum olei uncia, et tincturæ sennæ compositæ drachmis quatuor.

7th Nov.—Pain of wrist relieved, no return of cramp, an easier night, thirst, of which he had complained, is abated, pulse soft, alvine evacuation scanty, of a clay colour and fetid.

Habeat pilulas aloeticas duodecim, sumat tres omni trihorio.

8th.—Thirst more abated, with improving appetite, an easy night, no return of cramp, alvine discharge more copious than hitherto, partly fluid, and partly of unusual consistence, fetid, and of a clay colour; twelve pills taken.

Pulveris jalapæ compositi scrupulos duos omni mane.
Continuetur haustus.

9th.—He continues convalescent; pretty copious alvine discharge, discoloured and fetid.

Repetatur pulvis jalapæ compositus.

10th.—Three copious alvine evacuations, of more natural appearance and consistence, and less fetid than hitherto; free of ailment, appetite good.

Habeat pulveris jalapæ compositi semidrachmam omni mane.

Full diet.

13th.—Belly open, feces natural.

A bit of beef-steak daily.

14th Nov.—Belly rather open, stools natural, free of ailment, strength and appetite much recovered.

Habeat aquæ calcis uncias duodecim, partitis vicibus indies.

17th—Belly regular.

Omittatur aqua calcis.

19th.—Dismissed cured.

If the symptoms, in this case, are not precisely those of tetanus, they certainly denote a disease greatly resembling it. And if mercury, as some maintain, removes the severest tetanic spasm, it may appear singular that it had no effect in averting that, which, in the present instance, supervened so immediately upon a full mercurial course.

Royal Infirmary, 29th Dec. 1803.

BETTY NESBIT, *Ætatis* 24.—Complains of severe pain at the scrobiculus cordis, and along the margin of the false ribs of the left side, also of shooting pains in the back of the neck, descending along the spine, occasional severe headach, accompanied with pain in the orbits, and much dimness of sight, general debility and loss of appetite; pulse 96 and soft, tongue clean, belly slow; catamenia have been suppressed for three months, during which time she has had these complaints, which however, have been much aggra-

vated for the last fortnight, and attended with obstinate costiveness; was blooded, and got some medicines, of which she can give no account.

Habeat cras mane bolum jalapæ compositum.

30th Dec.—One scanty fluid green-coloured stool.

Habeat pilulas aloeticas duodecim, sumat duas omni biberio.

Pilulis sumptis, accipiat enema purgans si opus sit.

31st.—Headach and pain of the orbit of both eyes are relieved; pain of scrobiculus cordis, and along the margin of the false ribs, stiffness and pain of hind-neck, shooting down the spine, continue. This last seems to excite or is accompanied with occasional spasmodic affections of both arms; has had copious and dark-coloured alvine evacuation; pills have been taken and injection given.

Repetantur pilulæ aloeticæ ut heri.

Cras primo mane, habeat infusi sennæ uncias quatuor, ex infusi lini unciis sex, duabus vicibus.

1st Jan. 1806.—Sickness farther relieved, and headach and pain of the orbits less uneasy than yesterday; affection of hind-neck, of spine, and the spasms continue; has had plentiful alvine evacuation; the first motion was costive, latter ones less so, but consistent; the whole of natural appearance.

Repetantur pilulæ aloeticæ et infusum sennæ ut heri.

2d.—The affections of hind-neck, of spine, and of both

arms, have been more severe during last night and this morning; all of these, but particularly the latter, she now admits to have been present twelve months, and came on after much mental agitation. Has had spontaneous vomiting, alvine discharge has been copious, and consists chiefly of large scybala, floating in a dark-green fetid fluid.

Continuentur pilulæ aloeticæ et infusum sennæ.

3d Jan.—Pretty copious alvine discharge, containing scybala, but in other respects more natural than yesterday; retching has occurred.

R. Carbonatis magnesiæ,

Pulveris radcis rhei utriusque grana quindecim.

Misce, fiant pulveres tales duodecim.

Sumat unum omni bihorio ex aquæ menthæ uncia dimidia, usquedum iterum fluat alvus.

4th.—Twelve powders taken, alvine evacuation scanty, more natural, and less scybalous; pain of the orbits still more relieved, that of hind-neck and spasmodic affection considerably abated; no return of vomiting, headach continues, gastrodynia aggravated.

Habeat quam primum pilulas thebaicas tres.

Vespere enema purgans.

Intermittantur pulveres rhei.

5th.—Gastrodynia continued severe during the first part of the night, it remitted towards morning, and is now nearly gone: headach is abated, pain of hind-neck, of orbits, and spasm have disappeared; has had scanty alvine evacuation.

6th.—R. Sulphatis magnesiæ drachmas quinque,
Supertartritis potassæ drachmam,

Infusi senaræ uncias tres,
Infusi lini uncias sex.
Sit solutio quam primum duabus vicibus sumenda.

8th Jan.—Alvine evacuation upon the exhibition of the fast physic rather scanty; headach and pain of orbits are returned.

Repetatur solutio sulphatis magnesiae ut supra.

9th.—Has had full alvine evacuation; headach is gone, pain of orbit continues.

Applicentur cucurbitulae eum ferro utrique tempori, et à singulis temporibus, effluent sanguinis unciae tres vel quatuor.

10th.—Pain of orbits gone, and otherwise free of ailment; full quantity of blood taken.

Habeat pilulas aloeticas tres omni nocte.
Sulphatis magnesiae drachmas quatuor omni mane.

Full diet.

13th.—Belly has been fully regular.

Habeat pilulas aloeticas triginta sex.

Laxative pills; two, three, or four for a dose, when necessary.

Dismissed cured.

SECT. II.

EXTRACT OF A LETTER FROM MR JOHN BURNS, SURGEON IN GLASGOW, ADDRESSED TO THE AUTHOR.

“ Glasgow, 13th Aug. 1811.

“ I lately had a patient labouring under tetanic affection, whom I attended along with Dr Freer, Professor of Medicine in our University, and Mr Wilson, surgeon of this place. The following is the narrative of the case, which you have my permission to publish.

“ A. Z. *Ætatis* 50, of temperate habits, and, to use his own expression, as regular as clock-work in the alvine discharge, was seized on the 1st of June 1811 with cough, some degree of oppression in breathing, and pain in the head during the fits of coughing. For these complaints he was, between the 1st and 7th, bled freely, purged, blistered, and had a pectoral mixture containing squills and digitalis. By these means, the pectoral symptoms were removed, but he still complained of want of appetite, languor, flatulence, and some degree of costiveness. For these he took, between the 10th and 17th, tincture of steel, and opening powders, containing magnesia, rhubarb, and a little ginger. On the 18th, the bowels being more obstinate, he took six grains of calomel, with only a very slight effect. On the 19th, he was seized, early in the morning, with violent and almost incessant spasms: the diaphragm seemed to be the part first affected, as he felt a constriction there, instantly, however, followed by a slight extension of the spine, like an approach to tetanus, and startings of the arms and legs. The

pulse was natural, the tongue furred, and there was a little, but only a very little, confusion in the head. For these symptoms he took, in divided doses, the following mixture within three hours.

R. Camphoræ grana decem,
Magnesiæ albæ scrupulum unum,
Syrupi simplicis drachmas duas,
Tincturæ opii guttas sexaginta,
Aquæ menthæ piperitidis unciam unam,
Aquæ fontanæ uncias tres.
Misce.

“ This produced as little effect, as I have *invariably* found from anodynes and antispasmodics in chorea. He then took a purging mixture, containing salts and senna, and also a dose of calomel. The greatest part of these medicines he rejected speedily, and unfortunately he could not swallow pills. He had also frequent inclination to vomit, even after taking the mildest drink, and the mere sight of food excited nausea. The spasms continued to recur very often. In the afternoon he had a smart clyster, which brought away some fetid stools, and the spasm became less severe, and less frequent. Next day he had opening medicines, particularly calomel, which he kept, and in the afternoon he had a clyster. This operated pretty well, probably in consequence of having taken the calomel; the spasm, though less severe, still continued. The pulse, as formerly, was good. On the 21st, he took a solution of the phosphate of soda, part of which he retained, and it operated once or twice, the stools being fetid, and dark-coloured. In the evening he had an anodyne draught, without any good effect. Next day the laxative was repeated, and the clyster at night, which brought away two or three very offensive stools, with manifest remission of the symptoms; and from that time, his bowels could be kept open easily with laxatives, and the oc-

casional exhibition of a clyster. The spasm went entirely off, and, by strict attention to the bowels, he regained his appetite and strength.

“The principal difficulty here, arose from the ticklish irritable state of the stomach, by which the medicines were often rejected, and pills, which would have likely remained, could not be swallowed. Much benefit, in these circumstances, was derived from the saline clysters.”

APPENDIX X.

ANOMALOUS DISEASES.

THE following histories cannot be classed with any of the diseases of which I have treated. But as they afford examples of the extensive utility of purgative medicines, and as they may justify the adoption of a successful practice in similar instances of disease, which might be protracted, and perhaps terminate fatally under any other treatment, I submit them to the consideration of the medical public.

Heriot's Hospital, 30th October 1805.

JAMES MACALLUM, *Ætatis* 14.—This boy had suffered severely from toothach for some days, but was quite recovered from the violence of the pain, when, on the 6th instant, he became suddenly affected with a fit of anxiety

and terror, in which he appeared much agitated, with a wild expression of eye ; his countenance, at the same time, indicated great distress. A purgative medicine which was given operated well, and he made no farther complaint, till the evening of the 12th, when another fit of anxiety and terror seized him, and attacked him repeatedly in the course of that night. Another purgative medicine was given the following morning, which also operated well, and seemed to procure relief.

14th Oct.—He has passed a restless night, the fit above described returning when he was about to drop asleep. The fits are frequent this morning. He appears much agitated when in the fit, complains of a noise in his head, and has involuntary twitching of the muscles of both fore-arms. He is not trusted by himself, and he seems to be relieved when addressed in a soothing and encouraging manner. His pulse is calm, and tongue white. When free of this fit of distress, he has the appearance of one in full health.

R. Pulveris ipecacuanhæ scrupulum pro emetico.

15th.—Vomit operated briskly; stomach not loaded, had an attack immediately after the vomit, and frequently since.

Sumat quam primum pulveris jalapæ compositi drachmam dimidiam ; vespere pro re nata repetendam.

16th.—Both doses of the powder, and two aloetic pills given ; a formed rather scanty stool of a dark brown colour this morning. Attacks frequent through the night.

Habeat quam primum pulveris jalapæ compositi drachmam.

17th Oct.—A stool similar to that of yesterday, but more fluid.

R. Foliorum sennæ drachmas duas,
Tartritis potassæ et sodæ drachmas octo,
Extracti glycirrhizæ drachmam,
Aquæ fervidæ libram.
Sit infusum quam primum tribus vicibus sumendum.

18th.—Copious alvine evacuation.

Sumat vespere pulveris jalapæ compositi drachmam dimidiam.

19th.—Farther regular alvine evacuation. No return of fits of anxiety and terror since the night of the 16th instant.

Habeat indies ad tertiam vel quartam vicem pulveris jalapæ compositi scrupulum.

This boy continued to recover, and soon after the last report left the sick-room.

Edinburgh, October 1805.

A YOUNG WOMAN of a delicate constitution, but not liable to general bad health, was seized with frequent violent and bound cough, unattended with pain of breast, dyspnœa, and quickness of pulse, or heat of surface. In order to mitigate the cough, the severity of which excited much alarm,

lest rupture of vessels and hæmoptysis should ensue, blood-letting was practised once and again, and a blister was applied to the breast, while a low regimen was enjoined, and laudanum was given to procure sleep, which the cough had altogether banished. These means, so likely to have procured relief, were of no avail.

The experience of the effect of some purgative medicines, which had been given in the course of the disease, proved that the patient was either of a peculiarly constipated habit of body, or laboured under temporary constipation. It seemed, therefore, reasonable to me, as well as to another medical gentleman in attendance, to force the alvine evacuation by more powerful medicines than we had as yet employed. We succeeded, but not without difficulty, in obtaining the object in view. The appearance and odour of the feces evinced their morbid state; while the quantity that was dislodged proved that the feculent accumulation had been great. And there was no doubt of these circumstances having been the cause of the ailment, for the cessation of the cough, and the progress of convalescence kept pace with the gradual unloading of the bowels. Our patient was so satisfied of this, that she readily agreed to follow out a regular course of purgative medicines, in order to preserve her bowels in a regular state of daily and full evacuation.

This patient, four months afterwards, had another attack of pectoral symptoms, different however from the former one. She now complained of acute fixed pain across the lower part of the sternum, aggravated by the gentlest bodily exertion, and attended with great languor and feebleness. Her appetite was altogether gone, she passed sleepless nights, her countenance betokened much distress, her cheeks were alternately flushed and pale. With these symptoms

she had no cough, and when completely at rest, even in the recumbent posture, no dyspnœa.

On the first attack, the pain was so violent, as to threaten instant suffocation, which appeared to have been averted only by a prompt and copious bleeding. Blood-letting was afterwards repeated, which, as well as blistering, was of no use; the application of leeches seemed to mitigate the pain; and, on account of it, low diet was enjoined.

The other medical gentleman in attendance, and I, trusting to the account of our patient, and to the appearance of one alvine evacuation, were satisfied that the belly was regular; and we were the more readily so, as our patient, ever since her former indisposition, had been accustomed to attend to this circumstance.

Disappointed in our expectations of relief, we now became seriously alarmed, dreading the existence of vomica, with which we connected apprehensions of impending phthisis. These fears were not altogether concealed from the friends of our patient, who immediately asked the assistance of another medical gentleman.

Our joint opinion now turned upon the probability, that the disease might depend upon nervous irritation. Exercise in the open air, a fuller diet, and a tonic powder and mixture, were proposed. The patient's inability to bear the slightest motion, and her total want of appetite, precluded compliance with the two first proposals; and the tonic medicines, taken with great reluctance, were scarcely in use, when a copious fluid, dark-coloured, and peculiarly fetid stool arrested our attention. The previous history of this patient's health, and the present occurrence, indicated clearly our line of practice. Much fetid feculent matter was

brought off by appropriate purgative medicines; immediate abatement of the pain took place, and complete relief in all respects soon ensued. In eight or ten days no vestige of complaint remained. The patient is now perfectly well.

SUBSTANCE OF THE NARRATIVE OF HER OWN CASE,
TRANSMITTED BY A LADY TO THE AUTHOR.

“ In the end of June 1805, as a Summer residence, I went to the neighbourhood of Moffat, in perfect health. For the sake of a walk and social amusement, I every morning repaired to the sulphureous well, and drank a bottle of the water; and being of a full habit, which I found a little reduced by the exercise and use of the water, I persisted in this till the beginning of September. Then I became much annoyed during the night with a most profuse cold perspiration, which could not be removed by the application of heat. Sleep entirely left me; for I no sooner closed my eyes than I was roused by frightful nervous starting, and a confusion in my head so strange, that I dreaded approaching derangement.

“ I was informed that my ailment was a stomachic attack, occasioned by my having over-drunk the water, and was ordered an infusion of bark, cinnamon, and hot spices, which a good deal relieved me. I got home pretty free from the above complaints, but with a stomach so much weakened, that there were very few things which I durst admit into it, without suffering great pain in consequence

of it. Bitters, air and exercise were recommended. These I used all winter without any material change, except becoming very thin. All this time I was so obstinately costive, that I never had passage without the force of powerful medicine. As Spring advanced, I lost my strength and flesh entirely, each stomachic attack leaving me weaker and weaker. Costiveness was now considered to be the principal disease, and the pain of stomach only the consequence of it; and purgative pills, a laxative diet, and moderate exercise were recommended.

“ When I became your patient, towards the end of July 1806, I was reduced to a skeleton, and scarcely able to creep about, and so costive that it required sixteen of the pills which you ordered, *pilulæ aloeticæ*, to procure a passage. In the course of one week half the number had an equally good effect; and at the end of a fortnight, four pills were sufficient. The feces then began to assume a natural appearance, and the intolerable smell from them abated. During the above period, the quantity of strange unnatural stuff discharged from my bowels was inconceivable, and my strength, so far from being wasted was daily increasing, with a light and comfortable feeling of returning health, to which I had been long a stranger. About the middle of August I went a little way into the country, and took a mercurial medicine, which kept my bowels open, and made my mouth sore after the fourth dose. You then ordered me powders, composed as you told me of bark and rhubarb, a dose of which I take twice a-day with a laxative effect.

“ Since the commencement of this course of medicines, I have had few returns of the pain of my stomach, and those but slight. I now take without any fear moderate

exercise, and a variety of simple foods. I sleep amazingly well; my appetite and spirits are excellent, my flesh and strength are returning daily; and I am happy in being one of many who can bear testimony to the general usefulness of purgative medicines."

"October 1806."

I have frequently heard of this lady; she has enjoyed uninterrupted good health from the above to the present date.

Edinburgh, October 1811.

The following Letter I received from Mr JAMES ANDERSON,
Surgeon in Edinburgh,

My Dear Sir,

The inclosed are the principal circumstances of the case which I hinted at the other day, and you may use what liberty you choose with them, if you think they can be of any service.—I am,

Respectfully yours,

JAMES ANDERSON.

10. St James's Square, 8th Feb. 1809.

Dr HAMILTON.

“ Mrs B. aged 40, about five years ago, was seized with pain, accompanied with a sense of weight in the left lumbar region. She was, at that time, about six months pregnant.

“ A warming plaster was applied to the part, and she was desired to keep her bowels open with *supertartris potassæ*.

“ After delivery, (which was accomplished by a quick and natural labour) the pain was not in the least alleviated; but, in other respects, her recovery from the puerperal state went on as usual.

“ In a few months after this period, the pain became more severe and diffused, shooting towards the anterior part of the abdomen; the limbs became considerably debilitated, swelled, and pained; and she was soon after rendered altogether unable to walk without the aid of crutches

“ She used a variety of medicines, also cold and warm-bathing, without deriving any benefit from them.

“ These symptoms continued, and varied little, during five years; in this situation she became twice pregnant; the first labour was laborious, the second preternatural.

“ She now began to put little confidence in the use of medicines, and to lose all hopes of ever regaining her former strength, when she was accidentally met by a female acquaintance, who had laboured three years under a similar disease, from which she recovered by the use of strong purges. Mrs B. had recourse to the same means, and, by their frequent and continued use, the strength of the limbs speedily recovered, so that within three weeks she was able

to walk five or six miles in a day, without the aid of either crutch or staff. She describes the stools to have been dark-coloured, copious, lumpy, and very fetid. She had a large flow of urine while under the operation of the cathartic, and the *pulvis jalapæ compositus* was the one she used most constantly."

Dr King of Glasgow has been so obliging as to send me the following case, and has permitted me to publish it.

"2d Jan. 1811.—JOHN F——, three years of age, was attacked after breakfast, with vomiting which has continued at intervals all the forenoon. Pulse 100, countenance dejected, eye dim, tongue white, belly tense and hard. Has been unusually cross for the two last days. Has had a stool, in general, every day, except one, last week, when a dose of magnesia produced a proper effect; yet for the last three months he has often complained of his belly.

Let five grains of calomel be given immediately.

"3d.—Vomited much during the night; no stool; other symptoms as yesterday.

R. Ol ricin. unciam dimidiam,
Tinct. jalap.
Tinct. sennæ comp. utriusque drachmas duas.

Let a dessert spoonful be given every two hours, till the whole is taken, or a free stool procured.

“ 4th Jan.—Has taken all the medicine; had a small dark-coloured watery stool after the first spoonful, and again during the night, but without any appearance of feces. No sleep; complains much of his belly. Has not vomited; other symptoms as before.

R. Tinct. jalap.

Syrup. simp. utriusque unciam dimidiam.

This to be given as the last mixture.

“ At seven in the evening he had taken all the medicines without effect, a purgative clyster was given, and returned without feces.

Rep. tinct. jalap. e syrup. simp.

“ 5th.—Has taken all the medicine; no stool; appears worse; passed a very restless night, with some approach to delirium. Pulse very quick.

R. Fol. sennæ drachmas duas, coq. ex aq. font. unciis quatuor ad uncias duas, et cola.

Let one half be given immediately, and the rest in four hours.

“ 6th.—Has been restless all night. Took all the decoction without effect.

Let six grains of calomel be given now, and ten grains of jalap in the evening.

"7th. Jan.—Had a very small stool after the calomel, and a little also after the jalap, but too trifling to produce any effect on his disease; slept a little in the night; had again an inclination to stool, without passing any thing but a very little dark-coloured fluid. As antimonials, after producing their full emetic effect, have often been observed to operate by stool also, he took this day a saline mixture, with tartrate of antimony. A great quantity of dark-coloured bile was thrown up, and a little of a thinner dark fluid passed by stool, but without any feces.

"8th.—Last evening, at seven, he was kept ten minutes in the warm bath; after which he started much and screamed wildly; in the night he slept little, and was completely delirious, making frequent attempts to bite his left arm, seemingly insensible of the pain produced by his teeth, though the marks were evident.

Let him take one of the pil. colocynth. c. aloë immediately; and in the forenoon, at two doses, the following mixture:

R. Decoct. sennæ in. aq. unciis duabus.
Tinct. jalap. drachmas duas. Misce.

"9th.—Yesterday's medicines produced little or no effect. The warm bath again aggravated all the symptoms, as it did this day, when it was thought inadvisable to persist in it; strength much exhausted; has several times fallen suddenly and profoundly asleep in the midst of the most violent struggles. Has slept from the commencement of his illness, with his eyes half open. His sight appears much impaired.

Capt. pil. aloes colocynth. duas,

Applic. emp. epispast. inter scapulas,
Injic. enem. purg. vesp.

“ 10th Jan.—The clyster was returned nearly as injected; no stool; about six hours after the blister was applied became calm, and slept well till morning. Is evidently much easier, though no change of consequence has been produced on his bowels from the beginning of his illness to the present hour.

R. Ol. ricin.
Tinct. sennæ utriusque unciam unam.

Let him take a table-spoonful every two hours.

“ 11th.—Symptoms as yesterday; has taken all the mixture without effect.

Let it be repeated.

“ 12th.—Still no effect, though the medicine has again been all given.

Let it be repeated.

“ 13th.—The mixture has been all taken; some trifling evacuation, but no real feces.

Let him take a tea-spoonful of calcined magnesia three or four times a-day.

“ 14th.—Several doses of calcined magnesia were given at intervals yesterday; and at length the purgative medicines, thus accumulated, have begun to produce some good effects.

He has had several large stools of green glutinous matter, mixed with dry hardened feces in round compact balls, amounting in all to a large quantity, sufficient to account for all the symptoms: and however singular it may appear, I have no hesitation in avowing my belief, that the feces evacuated on the 12th or 13th day were, from the commencement, lodged in some part of the intestines.

“ From the time that his bowels began to act, the purgative plan was continued till all the symptoms were removed. Particular directions were given to attend to the state of his evacuations, and he now continues in perfect health.

“ *Glasgow, Oct. 12, 1811.*”

How numerous soever and minute the histories of the cases contained in this Appendix may appear to some readers, their importance, in my opinion, is such as to justify my retaining them. I have reason to believe they have tended in some degree to produce a material change in medical practice, and they serve, at the same time, to establish its utility and success. They may be considered as a kind of land-marks, to guide the young practitioner in his way to the acquisition of experience; they may teach him what he will not find in books; they may instruct him in that decision, steadiness, and attention so necessary to ensure success in conducting that particular administration of purgative medicines, which my inquiries and practice have emboldened me to recommend. They are therefore not to be read merely, they ought to be studied.—Besides these con-

siderations, I am supported on this occasion by very respectable authority. In treating on purging in the putrid fever that follows the confluent small-pox, Dr Freind, after relating, at great length the progress of this fever in a particular instance, subjoins the following remarks applicable to my purpose.

“ Historia hæc a me paulo latius atque prolixius deducta est, eo tantum animi consilio, ut, quia neque ex consuetudine esset, neque communi medicorum sententiæ congrueret hoc purgandi institutum, quid hoc tandem valeat efficere, aut quid inde boni expectare conveniat, lector ex hac explicatione distinctius facta internoscere possit. Quod quidem medicinæ genus ita parum usu esse receptum fateor, ut minime mirer plerosque huic admodum adversari. Liberum cuique suum sit iudicium : nec dubito quin ii, a quibus dissenseram, habeant ea argumentorum pondera, quibus sententiam suam tueantur. Sua illis placuit opinio, mihi fortasse nimium mea. Siquid liberius sit dictum, id non contradicendi, sed veritatis in re tam gravi aperiendæ studio dictum putetur.”

Hippocratis de morbis popularibus, Liber primus et tertius, Gr. et Lat. His accomodavit novem de febribus commentarios Johannes Freind, 4to. Lond. 1717, p. 97.

